University Of Jordan

Event Planner App

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ABSTRACT

We are a student at the College of Information Technology at. University ofJordan.

In this project we are seeking to build an application to make the process of reservation of halls in predefined locations in university campus in smooth and easy way for both students and professors by selecting the suitable halls accordingto attendance number and halls environment and many properties the user can select before the reservation process.

ACKNOWLEDGMENT

we cannot express enough thanks to Dr. *Osama Harfoshi* and Dr. *Hamed AlBdour* fortheir continued support.

They did not hesitate for a moment to offer us suggestions and to share their experience with us. We really appreciate it and thank you all.

1.0 CHAPTER ONE: INTRODUCTION

1.1 Preamble

In this project, we chose to develop an application that would simplify the process of reserving university lecture rooms for both students and professors, allowing them to select the most appropriate hall based on its number, location, and faculty affiliation.

1.2 Project Motivation

Our motivation for implementing this project is to develop a streamlined, user-friendly, and effective software for students and faculty to reserve and attend events.

By providing a date and event name for the available events, and by providing the available places and date for the reservation halls.

1.3 Problem Statement

We have produced a form with questions concerning events, whether for booking or attending, and it turns out that the university of Jordan does not have a clear procedure for events.

And it was questioned whether an application for booking and attending events would be useful. Most responses were affirmative.

1.4 Project Aim and Objectives

This project's objective is to develop an application that allows users to schedule and attend events while specifying the event's time and location. We will ensure that the app's user interface is intuitive and efficient.

1.5 Project Scope

This project encompasses all university of Jordan students and faculty members who wish to reserve rooms or attend activities, and it is accessible from any location and on any device.

1.6 Project software and hardware requirements

Project Software and Hardware Requirements For windows	Project Software and Hardware Requirements For macOS

• OS: Windows 7 SP1 64-bit, Windows 8.1 64-bit, Windows 10 64-bit, Windows 11 64-bit
• Free storage: 1.64 GB
• Pre-installed tools:
  ○ Windows PowerShell 5.0 or newer
  ○ Git 2.x
	• OS: macOS (64-bit)
	• Free storage: 2.8 GB
	• Pre-installed tools: bash, curl, git 2.x, mkdir, rm, unzip, which, zip

Table 1: Software and hardware requirements

1.7 Project limitations

This project has various limitations, the most significant of which is that it is restricted to university of Jordan students and professors and reservation conflicts, meaning that all colleges and halls must conform to the app so that genuine reservations and app reservations do not clash.

1.8 Project expected output

These tools can promote interaction and improve communication between event organizers and attendees, as well as between attendees, by providing attendees with the event's location, time, and topic via mobile phones.

1.9 project schedule

Task	Description	Start Time	End Time	Duration	Dependency
T1	Project Name, Brainstorming	27/4/2022	1/5/2022	4 days	-------
T2	Planning the project	4/5/2022	7/5/2022	3 Days	T1
T3	Hardware & Software	7/5/2022	9/5/2022	2 Days	T2
T4	Feasibility Study	9/5/2022	10/5/2022	1 Day	T3
T5	Functional req.	10/5/2022	12/5/2022	2 Days	T4
T6	Non-Function req.	12/5/2022	15/5/2022	3 Days	T5
T7	Context Diagram	15/5/2022	16/5/2022	1 Day	T6
T8	Data-Flow Diagram	16/5/2022	17/5/2022	1 Day	T7
T9	Entity Relationship Diagram	17/5/2022	18/5/2022	1 Day	T8

T10	Use-case Diagram	18/5/2022	20/5/2022	2 Days	T9
T11	Sequence Diagram	20/5/2022	25/5/2022	5 Days	T10
T12	UML class diagram	25/5/2022	26/5/2022	1 Day	T11
T13	GUI design	26/5/2022	27/5/2022	1 Day	T12
T14	Create Database	27/5/2022	29/5/2022	2 Days	T13
T15	Testing	29/5/2022	31/5/2022	2 Days	T14
T16	Documentation	31/5/2022	9/6/2022	9 Days	Depends on all above tasks
T17	Submission	9/6/2022	9/6/2022	1 Day	T16

Table 2: project schedule

1.10 Report outline

This initiative is designed to assist all students and faculty at the University of Jordan in simply reserving and attending events, as well as gaining access to information about venues and events. And reduce the time and effort required to seek for a vacant venue and learn about current events.

The project is structured as follows:

- **Chapter One Presents** the preamble, project motivation, problem statement, project aim and objectives, the project scope, project software and hardware requirements, the project limitation,project expected output project schedule and the report outline.
- **Chapter Two: Represents** the related existing system, the overall problem of existing systems,overall solution approach.
- **Chapter Three**: **Represents** the database feasibility study, target users,

- **Chapter Four: Represents** Context diagram, Data flow diagram, Entity relationship diagram,use case diagrams, sequence diagrams, UML class diagram and design.

2.0 CHAPTER TWO: PROJECT BACKGROUND AND EXSITING SYSTEM

2.1 introduction

After we searched the web, we found non-Arabic similar systems and all the related systems that we found offers a variety of services along with services like the ones that application.

2.2 existing systems

1. Super Planner: A business application for the professional event planner. Its features include calculators for venue capacity, staffing, catering, staging, projection, and dance floor.
2. Eventbrite: A platform to create an event, promote it, and sell tickets. It doubles as a social network, so people can discover and share events that match their passions.

2.3 overall problems of existing systems

They don't offer a platform where you can organize and plan events.

Made especially for the university of Jordan attendees since not all theaters are recognizable on google/apple maps.

2.4 overall solution approach

We are going to get data from the university's theaters and arenas which will make it easier for planners and attendees to attend these activities which our application will make it easier for both.

2.5 summary

Our proposed system is the solution for the existing problem in the university regarding event planning.

And we will do our best to make our platform as easy as possible to plan and attend an event.

3.0 CHAPTER THREE: SYSTEM REQUIREMENTS ENGINEERING ANDANALYSIS

3.1 Introduction

This chapter includes in detail the system requirements and analysis with full description about functionality of the system including the definition and specification for each requirement.

3.2 Feasibility Study

3.2.1 TECHNICAL FEASIBILITY

• The system is developing online e-services as a mobile application. It could be run at any time or placeif an internet connection is available.

• Programming Language: flutter and MySQL for database implementation.

• Hardware: Any technical device that includes an internet can download and use this application.

3.2.2 OPERATIONAL FEASIBILITY

• Mobile applications are familiar to wide users, no need for too much training on them.

• THIS PROJECT WILL BENEFIT STUDENTS AND FACULTY MEMBERS WITH THE SERVICES THEY NEED PROVIDING ADEQUATE THROUGHPUT AND RESPONSE TIME, WHICH MAKES THEM SATISFIED WITH THERESULTS.

3.2.3 Economic Feasibility

- DEVELOPMENT COST:
- **Personal Cost:**

Employee	Cost Per hour	Hours	Total cost per hour
1 System Analyst.	23 JD	30 hr.	690 JD.
1 Programmer	17 JD	125 hr.	2125 JD.
1 GUI designer	12 JD	29 hr.	348 JD
1 Database Specialist	13 JD	16 hr.	208 JD
Total Cost:			**3371 JD.**

Table 3 Personal Costs

- NEW HARDWARE'S AND SOFTWARE'S:

Hardware & Software	Cost
1 Computer	500 JD.
1 DBMS Software	200 JD
1 development Server	750 JD
Total Cost:	**1450 JD.**

Table 4 New Hardware's and Software's

- **Development Cost =** 3371 + 1450 = 4821 JD - (For Development Year)**.**

- OPERATING COSTS:
  - **Employee**:

    2 Programmers (100 hr. each 13 JD/ hr.) = 1300 JD.

    Total= 2600 JD

  - EXPENSES:

    1 Maintenance agreement for server (350 JD).

    1 Maintenance agreement for DBMS Software (200 JD).

    Total= 550 JD.

  - Operating costs= 2600 + 550 = 3150 JD - (For First Operating Year).

- BENEFITS:

- **Tangible benefits:** Benefits that can be measured in money and with certainty that resultedfrom information forms.

1. Cost reduction or avoidance communication gap in the old process 450 JD
2. Error reduction 400 JD
3. Increased flexibility 500 JD
4. Increased speed of activity 550 JD
5. Improvement in management planning or control 3000 JD

Table 5 Tangible BENEFITS WORKSHEET: year 1-5

Total Tangible Benefits = 4900 JD

- **Intangible benefits:** Benefits that cannot be easily measured in money and withcertainty that resulted from information forms.

Cash flow	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Development Cost	(4821)	0	0	0	0	0
Operating Cost	0	(3150)	(4350)	(5350)	(6350)	(7350)
Benefits	0	4900	5900	6900	7900	8900
Discount Rate (10%)	1	0.9091	0.8264	0.7513	0.6830	0.6209
Time Adjusted Cost	(4821)	(2863)	(3594)	(4019)	(4337)	(4563)
Time Adjusted Benefits	0	4454	4875	5183	5395	5526
Cumulative Time Adjusted Cost	(4821)	(7684)	(11278)	(15297)	(19634)	(24197)
Cumulative Time Adjusted Benefits	0	4454	9329	14512	19907	25433
Cumulative Time Adjusted (Cost& Benefits)	(4821)	(3230)	(1949)	(785)	273	1236

Table 6 Payback analysis

1- **Payback Year** = The Fourth Year (Year 4).

2- **Lifetime ROI (Return on Investment**) = (25433 – 24197) / 24197 = 5%, (Estimated Lifetime Benefits - Estimated Lifetime Cost) / Estimated Lifetime Cost = 5%.

3- **Annual ROI =** Lifetime ROI / Lifetime of The System = 0.01

4- **Net Present Value =** Cumulative Benefits - Cumulative Cost = 25433 – 24197 = 1236

3.3 Requirements Elicitation Techniques

Here are statistics about the survey that was filled out by some of the university students.

QUESTIONNAIRES:

This technique has the advantage of providing a lot of information for statistical analysis. However, the questions must be well designed to be clear and to avoid something called “leading questions”, which bias the responses.

RESPONSES:

Do you think it's difficult to attend events and reserve halls in the university of Jordan?

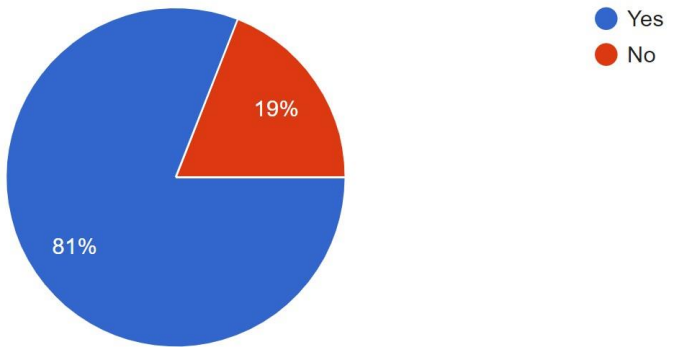

Figure 1 Response 1

Do you prefer using mobile apps to attend and reserve events at the JU than traditional ways?

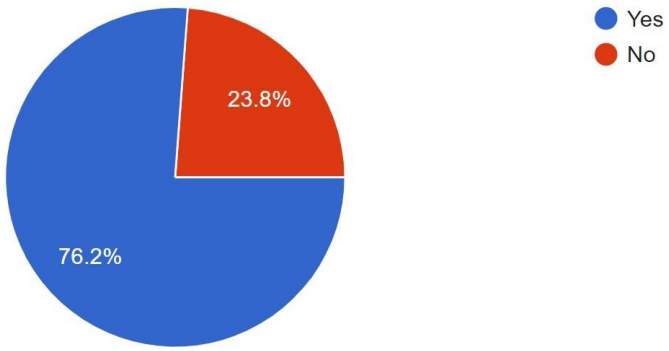

Figure 2 Response 2

If you find a event planner app to reserve and attend events at the JU would you use it?

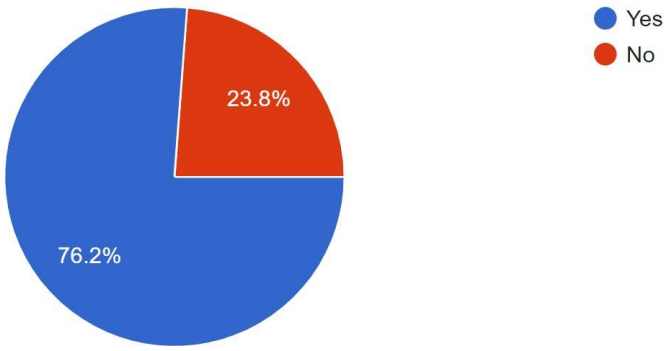

Figure 3 Response 3

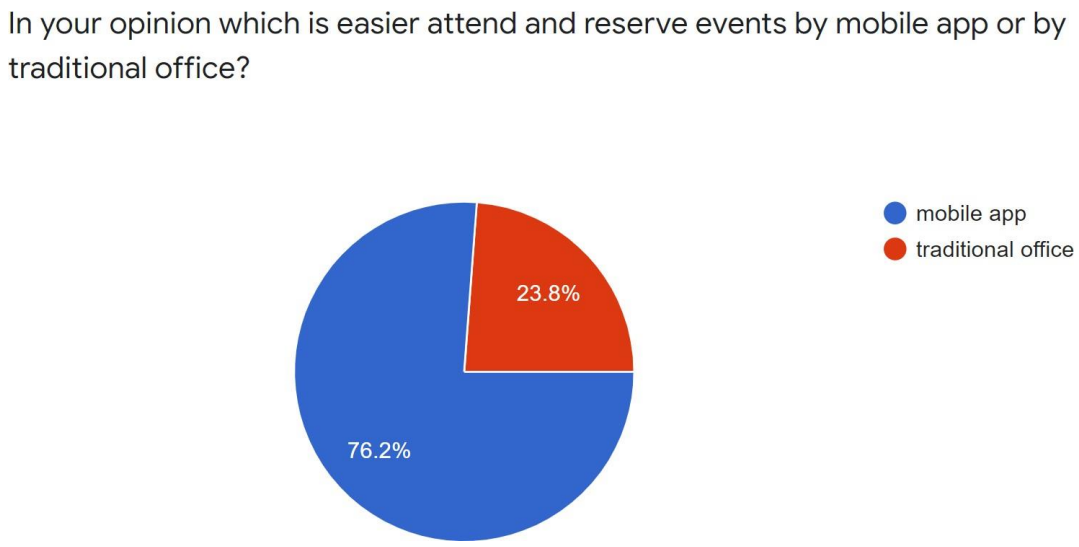

Figure 4 Response 4

3.4 Targeted Users

Students and faculty members at the University of Jordan.

3.5 Functional Requirement Definition

- Students and faculty members at the University of Jordan.

1. **Registration**: There is no registration because we use the same university email.

2. **Login**: The users log in to the system.

3. **Logout:** The users can log out of the system once finished.

4. **Password reset:** The user can reset their password when they forget it.

5. **Verification:** users will reset their passwords after entering the verification code sent to theiremail or phone number.

6. PROFILE:

users can do the following:

- Edit their personal information.
- Edit notification settings.
- Send feedback.
- Report a bug.

3.6 Functional Requirement Specification

- Students and faculty members at the University of Jordan.

1- LOGIN PAGE:

1.1- The user enters his email and password then clicks the login button.

1.2- If the previous fields were entered correctly the home page will be opened, if not the user will re-enter them again.

2- SIGN OUT:

2.1- The user clicks on the log out button from the Edit Profile page.

3- RESET PASSWORD:

3.1- If the user forgets the password, click on "**Forgot Password**" bottom from the Sign in page.

3.2- Then enter his email to start resetting the password.

4- VERIFICATION:

4.1- After the user entering his email, he will receive verification code on it.

4.2- Then enter the verification code.

4.3- Click "**verify**" bottom to be able to reset the password.

5- EVENTS:

5.1- The user clicks on "**Events**" from the home page.

5.2- Then the current and upcoming events appear.

6- RESERVE HALLS:

6.1- Click on “Reserve Your Hall” from the home page to Reserve your hall.

7- SETTINGS:

7.1- Click on “Settings” from the home page to edit profile and notifications.

3.7 Non-Functional Requirements

Requirement	Description
Security	The app shall be very secure since it contains sensitive information such as emails, Students and faculty members’ information and passwords.
Performance	Our mobile application should run fast to provide the best service for users.
Reliability	The application should be as reliable as possible since we have critical information.
Usability	Our mobile application should be easy to understand, the user should be able to use it in a smooth way.
Availability	Our mobile application will be available for all users and this mobile application will be available for users anywhere and anytime tr needed if you have internet access.
Privacy	No one shall have access to the database or the website except the people authorized.
Portability	The system must be compatible with various popular operating systems; It should work on IOS and Android.

3.8 Summary

The chapter includes the elicitation techniques that were applied to analyze and conduct the functional and non-functional requirements regarding the application, and the delivery the aim that why Students and faculty members use the application.

4.0 CHAPTER FOUR: SYSTEM DESIGN

4.1 Introduction

Modeling Diagrams help to clarify and communicate ideas about the user requirements that the software system must support. As well as they identify and describe functional behavior and structure of the software. In this chapter we will focus on system design, the context diagram that clarifies the system requirements and their relationships are addressed in section 4.2, Data flow diagrams DFD in section 4.3, in section 4.4 is Entity Relationship Diagram, UML Use Case diagram in section 4.5, UML Use Case diagram in section 4.6, UML Sequence diagram in section 4.6, UML Class diagram in 4.7.

4.2 Context Diagram

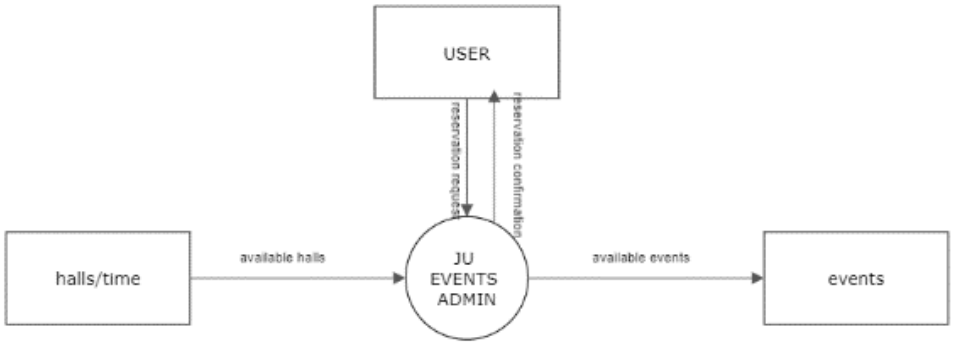

Figure 5 Context Diagram

4.3 Data Flow Diagram (DFD)

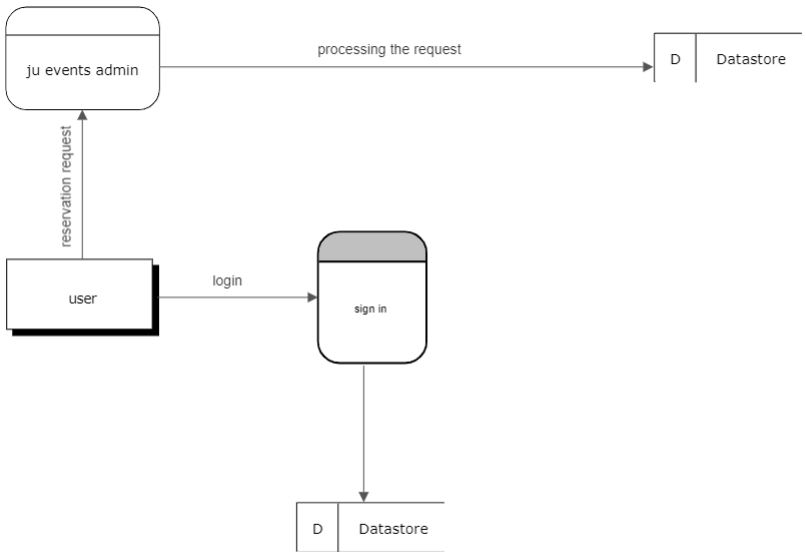

Figure 6 Data Flow Diagram (DFD)

4.4 Entity Relationship Diagram (ERD)

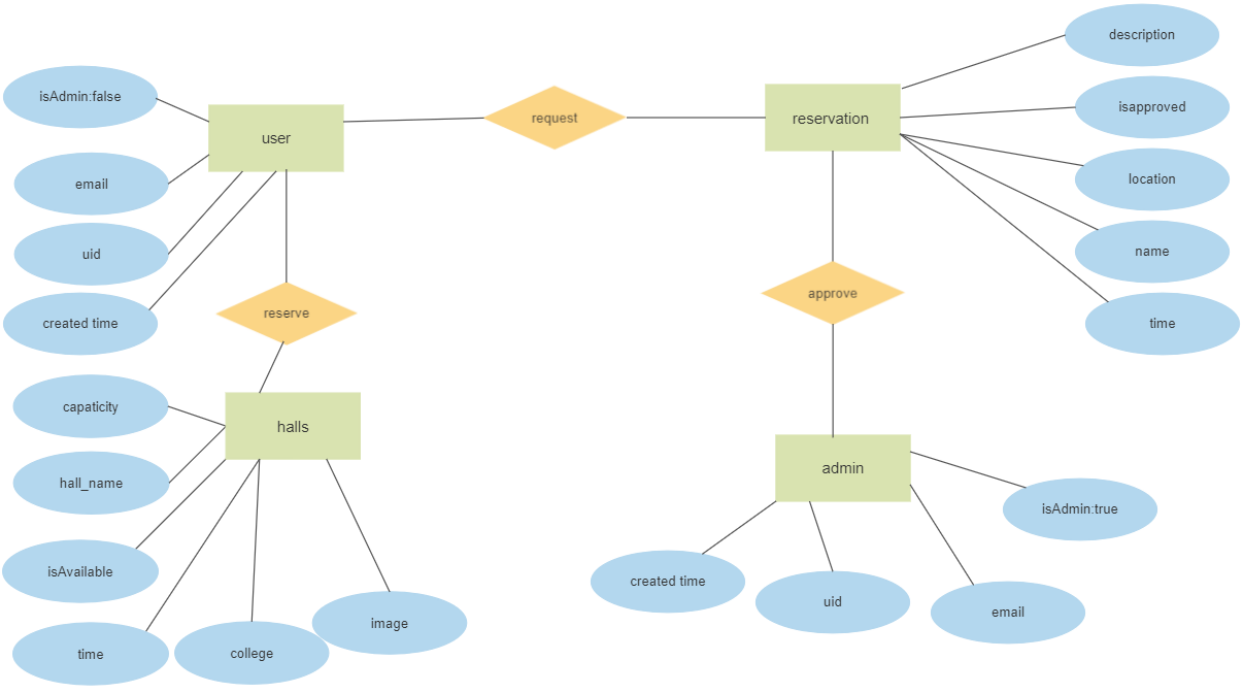

Figure 7 Entity Relationship Diagram (ERD)

4.5 UML Use Case Diagram

A UML use case diagram is the primary form of system/software requirements for a new software program underdeveloped. Use cases specify the expected behavior (what), and not the exact method of making it happen (how).

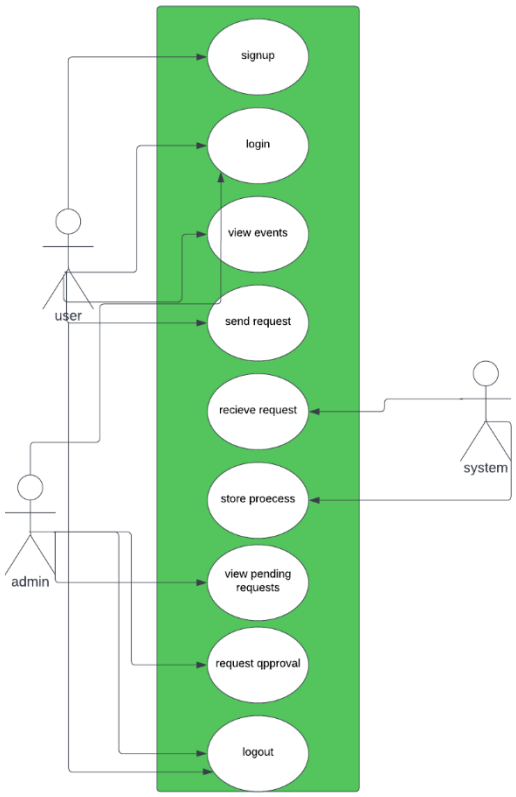

Figure 8 UML Use Case Diagram

4.6 UML Sequence Diagram

UML Sequence Diagrams are interaction diagrams that detail how operations are carried out. They capture the interaction between objects in the context of a collaboration. Sequence Diagrams are time focus, and they show the order of the interaction visually by using the vertical axis of the diagram to represent time what messages are sent and when.

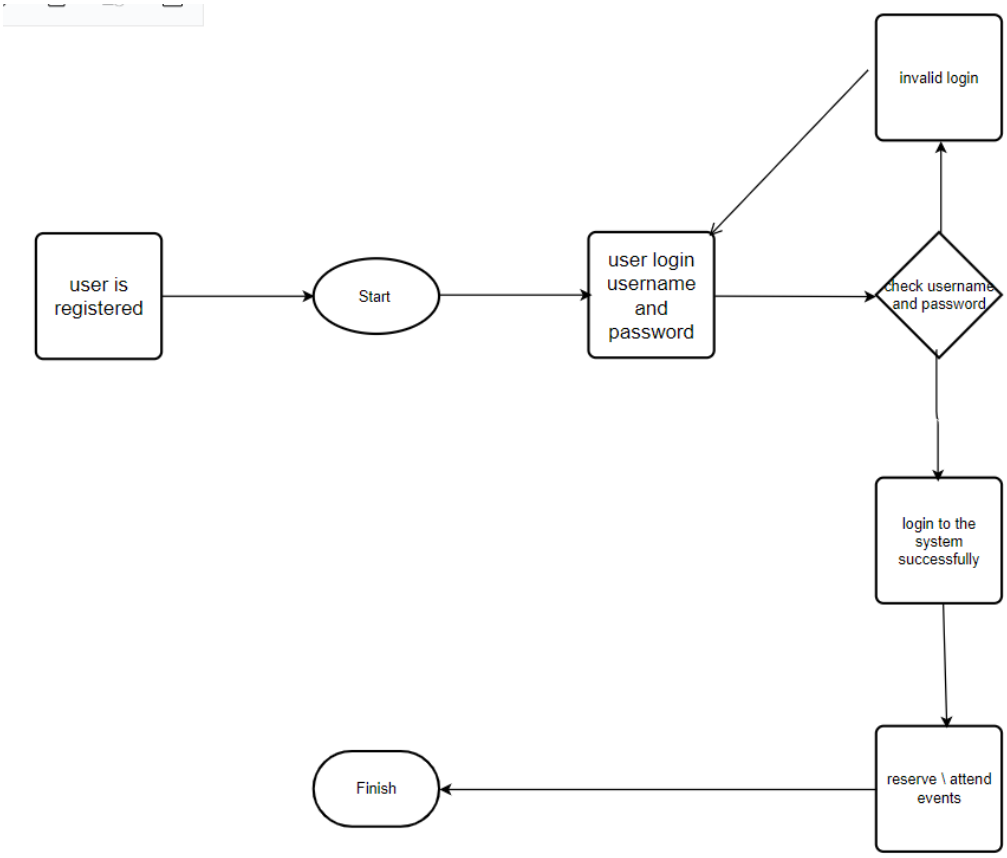

Figure 9 UML Sequence Diagram

4.7 UML Class Diagram

a class diagram in the **Unified Modeling Language (UML)** is **a type of static structure diagram** that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects.

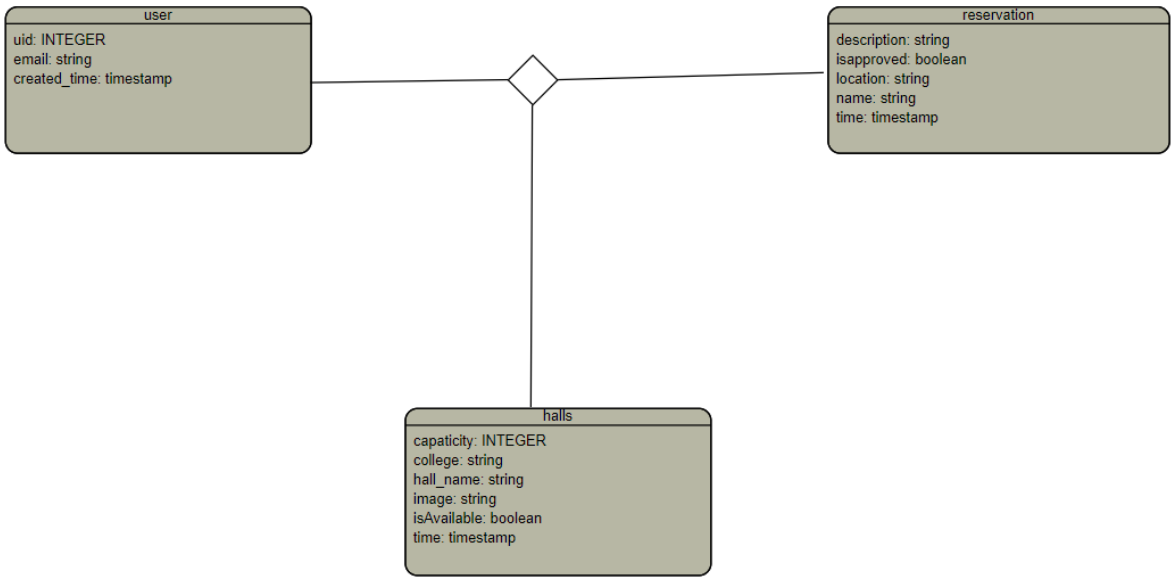

Figure 10 UML Class Diagram

4.8 Summary

In this chapter, we illustrated the Context-diagram, Data Flow Diagram (DFD), Entity Relationship diagram (ERD), UML use case diagram, sequence diagram and a class diagram, and we made the graphical user interface for our application.

5.0 CHAPTER FIVE: SYSTEM IMPLEMENTATION

5.1 Introduction

System implementation it's an important phase is the system, at this stage designer start design the system from interface to end of the database implementation. Therefore, this chapter describe the database implementation relations, also the graphical user interface implementation figures.

5.2 Code Implementation

```dart
import 'package:flutter/gestures.dart';
import 'package:flutter/material.dart';
import 'package:flutter_localizations/flutter_localizations.dart';
import 'package:firebase_core/firebase_core.dart';
import 'auth/firebase_user_provider.dart';
import 'auth/auth_util.dart';

import 'flutter_flow/flutter_flow_theme.dart';
import 'flutter_flow/flutter_flow_util.dart';
import 'flutter_flow/internationalization.dart';
import 'index.dart';

void main() async {
  WidgetsFlutterBinding.ensureInitialized();
  await Firebase.initializeApp();
  await FlutterFlowTheme.initialize();

  runApp(MyApp());
}
```

Figure 11 main.dart 1

```dart
class MyApp extends StatefulWidget {
  // This widget is the root of your application.
  @override
  State<MyApp> createState() => _MyAppState();

  static _MyAppState of(BuildContext context) =>
      context.findAncestorStateOfType<_MyAppState>()!;
}

class _MyAppState extends State<MyApp> {
  Locale? _locale;
  ThemeMode _themeMode = FlutterFlowTheme.themeMode;

  late Stream<JuEventsFirebaseUser> userStream;
  JuEventsFirebaseUser? initialUser;
  bool displaySplashImage = true;

  final authUserSub = authenticatedUserStream.listen((_) {});

  @override
  void initState() {
    super.initState();
    userStream = juEventsFirebaseUserStream()
      ..listen((user) => initialUser ?? setState(() => initialUser = user));
    Future.delayed(
      Duration(seconds: 1),
      () => setState(() => displaySplashImage = false),
    );  // Future.delayed
  }
```

Figure 12 main.dart 2

```dart
  @override
  void dispose() {
    authUserSub.cancel();

    super.dispose();
  }

  void setLocale(String language) =>
      setState(() => _locale = createLocale(language));
  void setThemeMode(ThemeMode mode) => setState(() {
        _themeMode = mode;
        FlutterFlowTheme.saveThemeMode(mode);
      });

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      debugShowCheckedModeBanner: false,
      title: 'JU EVENTS',
      localizationsDelegates: [
        FFLocalizationsDelegate(),
        GlobalMaterialLocalizations.delegate,
        GlobalWidgetsLocalizations.delegate,
        GlobalCupertinoLocalizations.delegate,
      ],
      locale: _locale,
      supportedLocales: const [Locale('en', '')],
      theme: ThemeData(brightness: Brightness.light),
      darkTheme: ThemeData(brightness: Brightness.dark),
      themeMode: _themeMode,
```

Figure 13 main.dart 3

```dart
  localizationsDelegates: [
    FFLocalizationsDelegate(),
    GlobalMaterialLocalizations.delegate,
    GlobalWidgetsLocalizations.delegate,
    GlobalCupertinoLocalizations.delegate,
  ],
  locale: _locale,
  supportedLocales: const [Locale('en', '')],
  theme: ThemeData(brightness: Brightness.light),
  darkTheme: ThemeData(brightness: Brightness.dark),
  themeMode: _themeMode,
  home: initialUser == null || displaySplashImage
      ? Center(
          child: SizedBox(
            width: 50,
            height: 50,
            child: CircularProgressIndicator(
              color: FlutterFlowTheme.of(context).primaryColor,
            ),  // CircularProgressIndicator
          ),  // SizedBox
        )  // Center
      : currentUser!.loggedIn
          ? DemoWidget()
          : SignuppageWidget(),
);  // MaterialApp
```

Figure 14 main.dart 4

5.3 Database Implementation

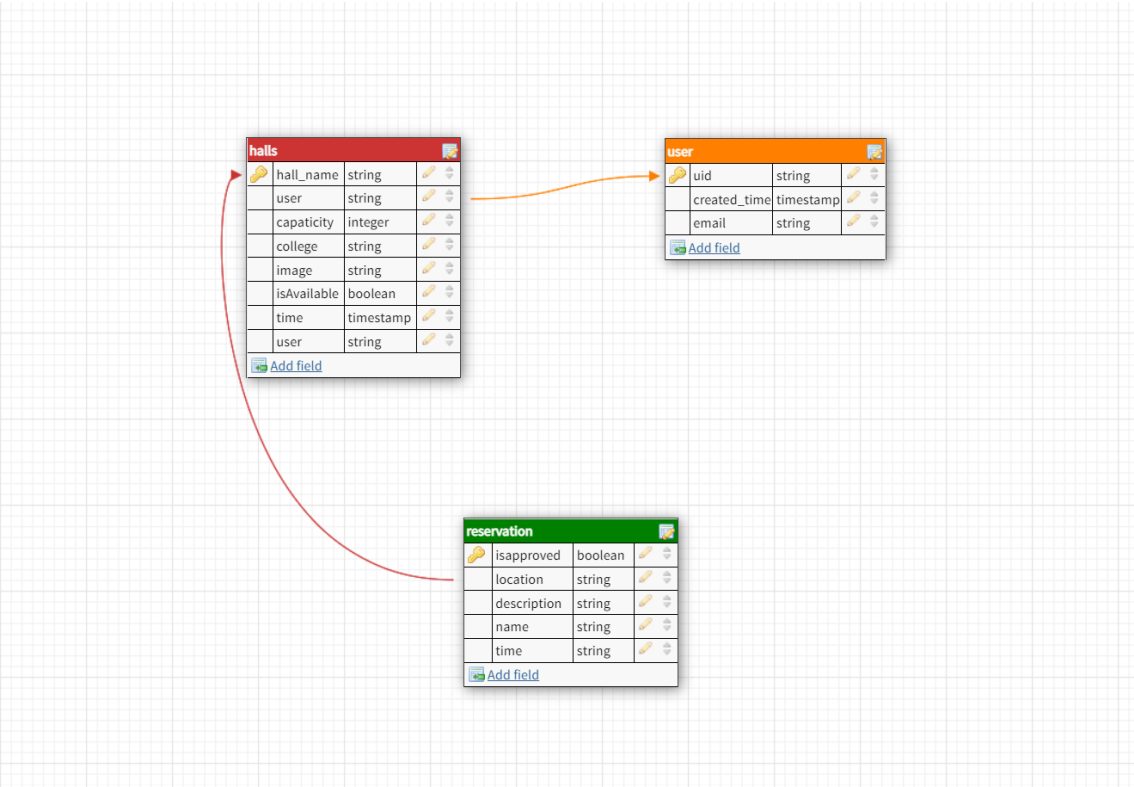

Figure 15 Database Implementation

5.4 Graphical User Interface Implementation

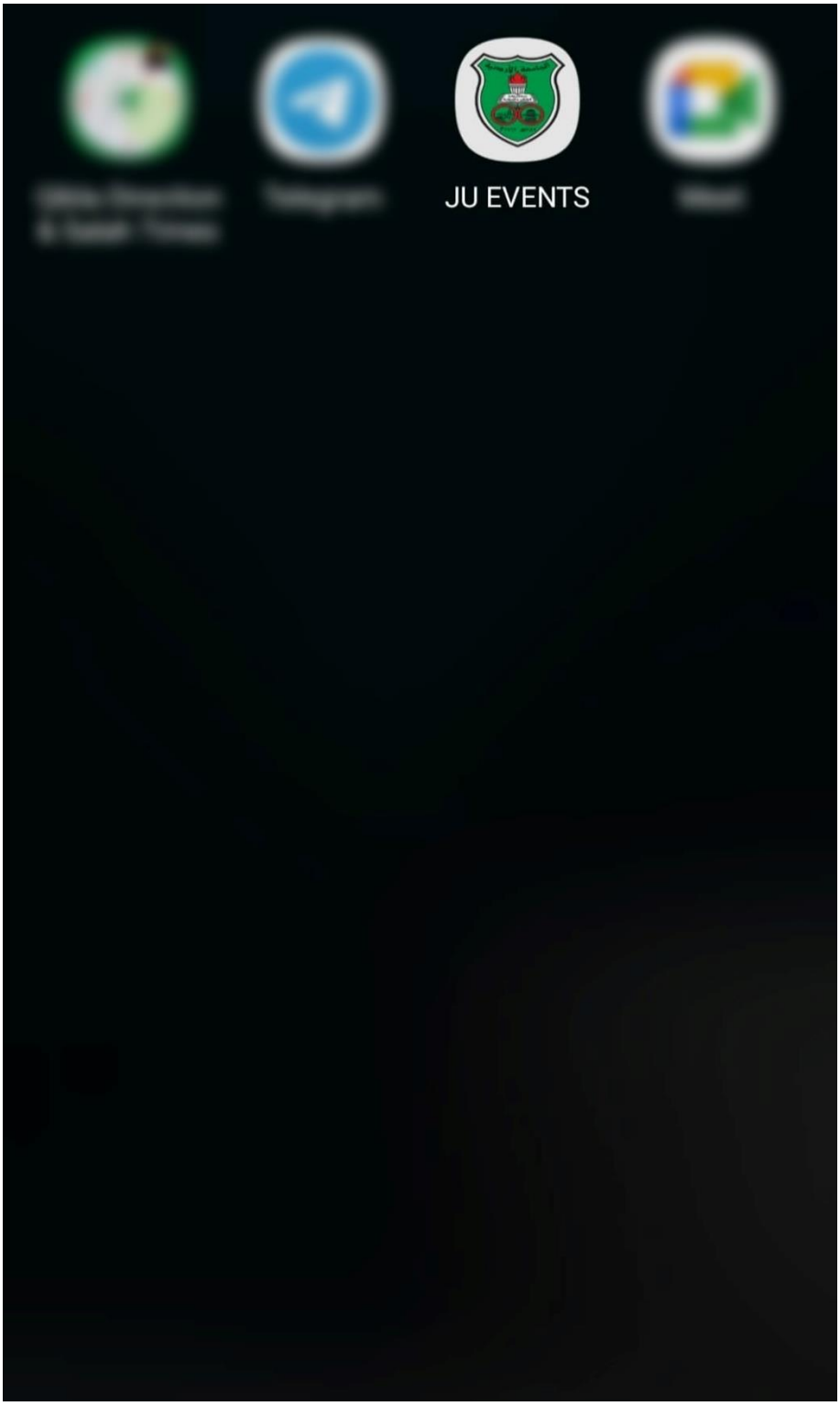

Figure 16 app icon

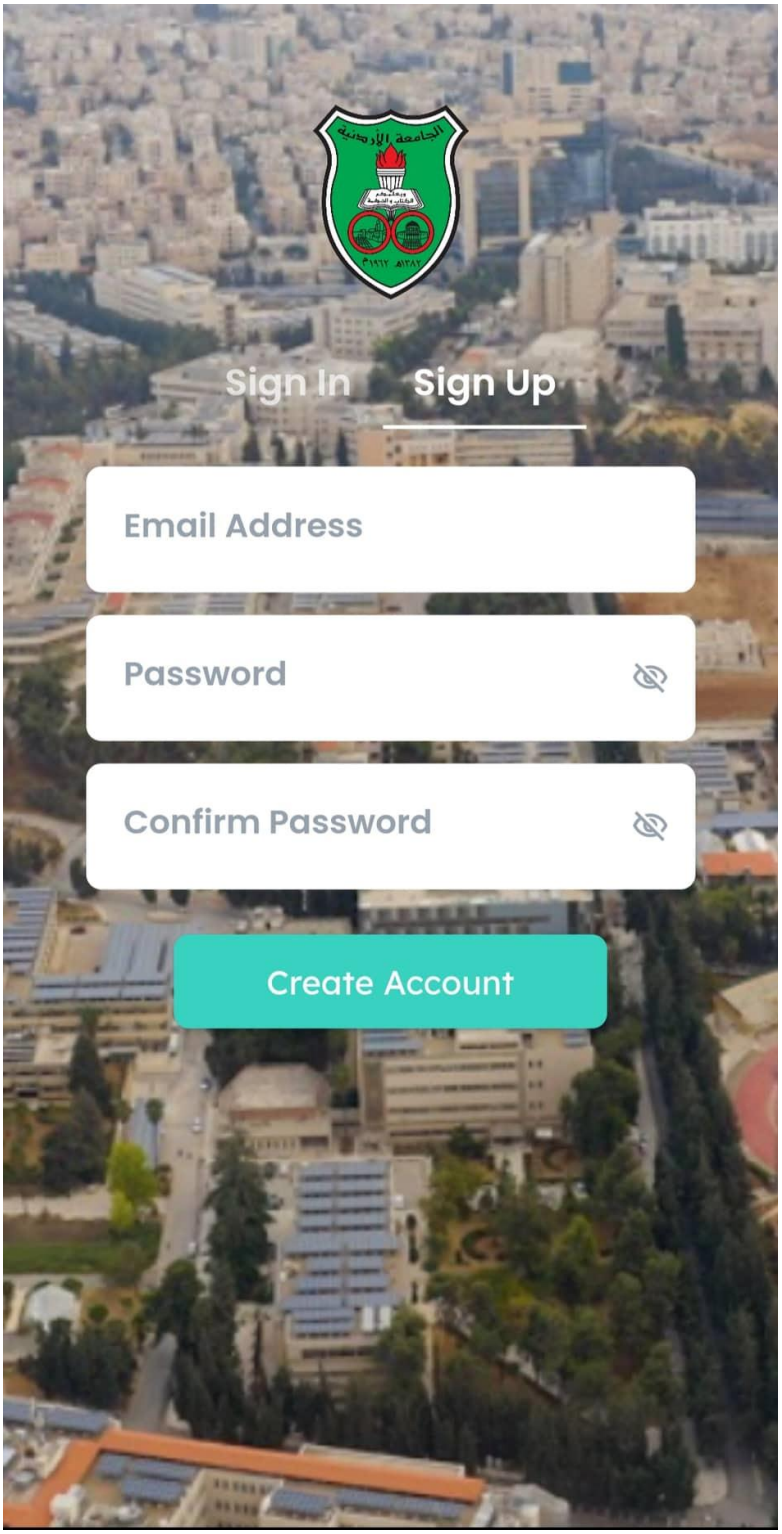

Figure 17 empty sign-up page

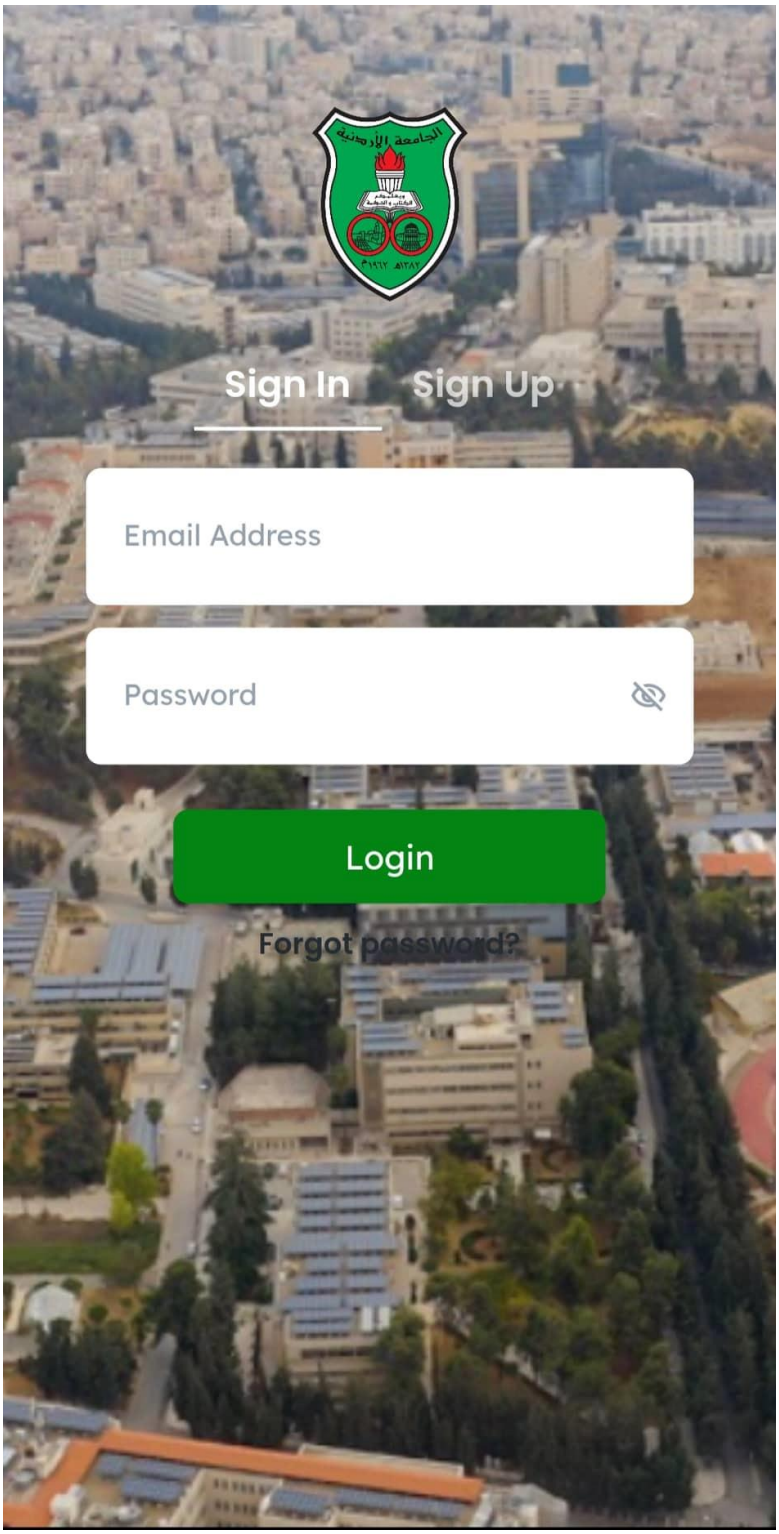

Figure 18 empty sign in page

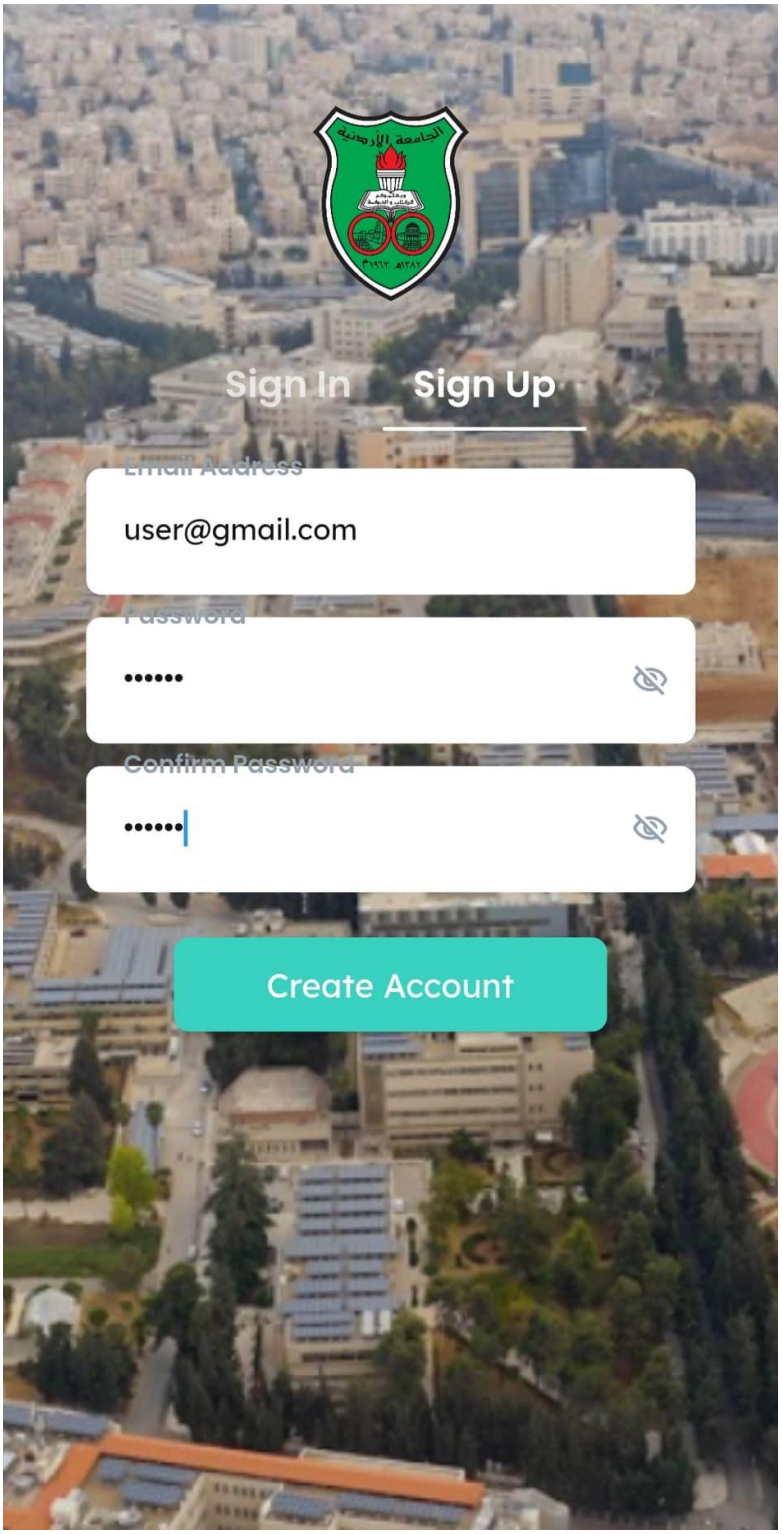

Figure 19 sign up page

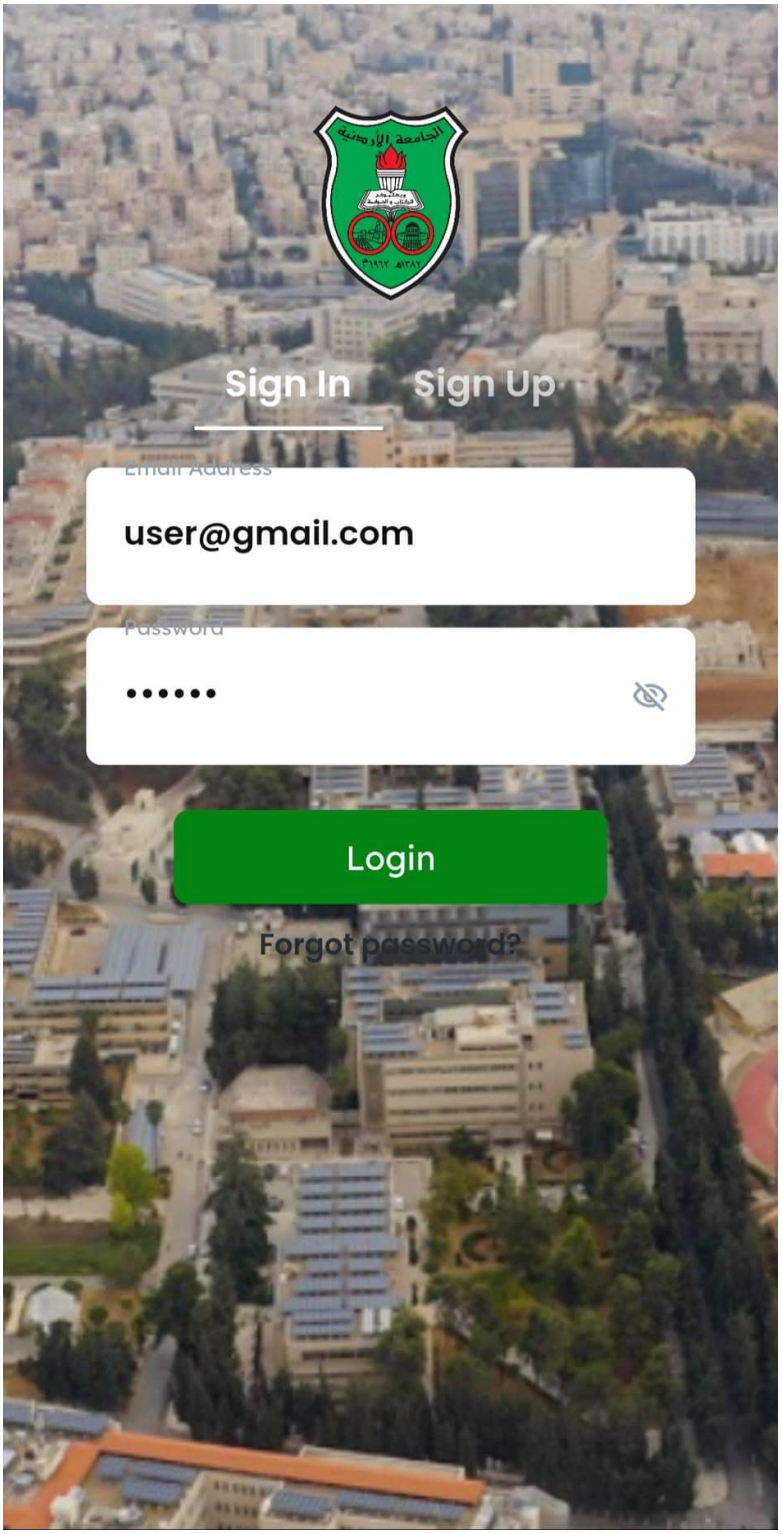

Figure 20 sign in page

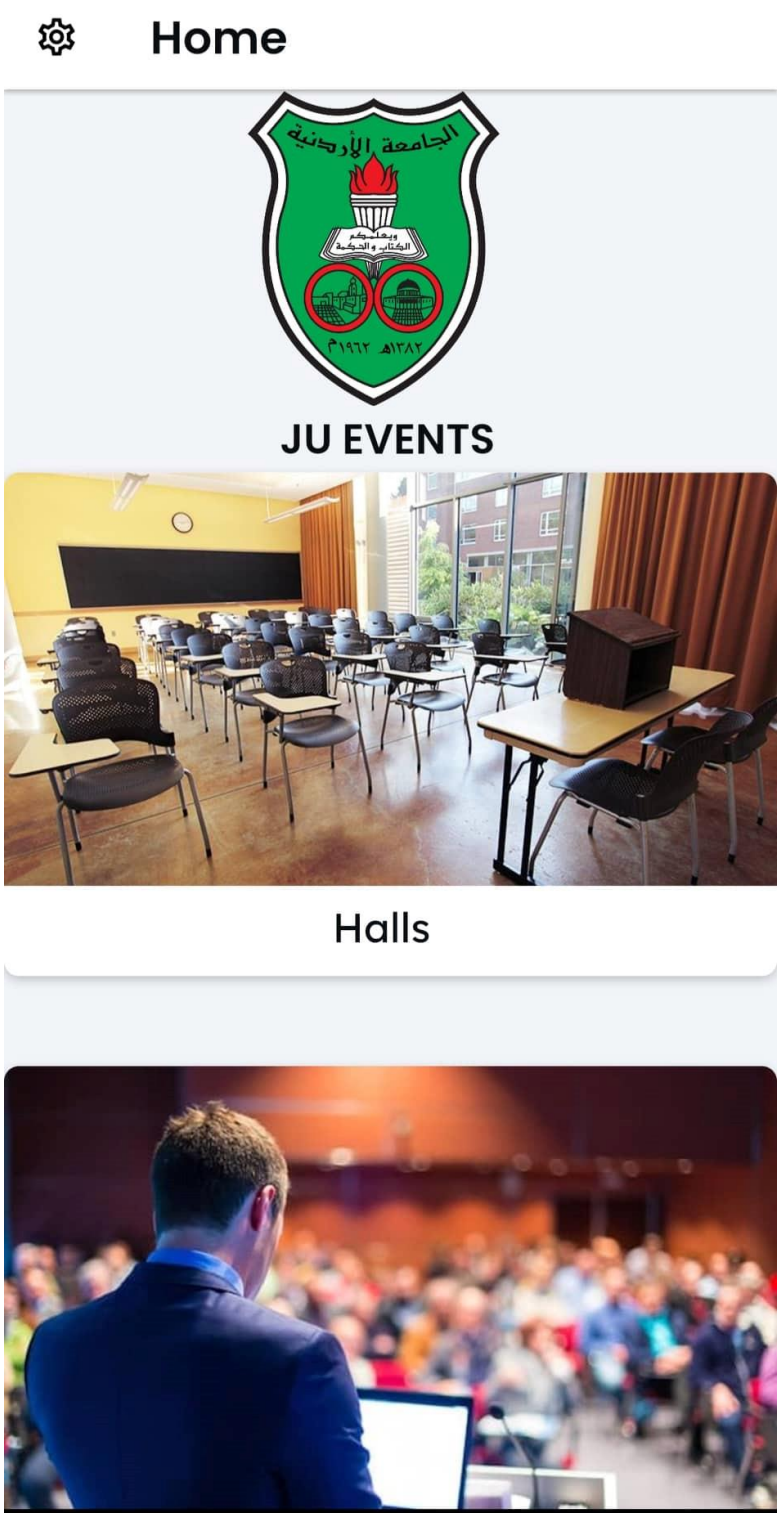

Figure 21 home page 1

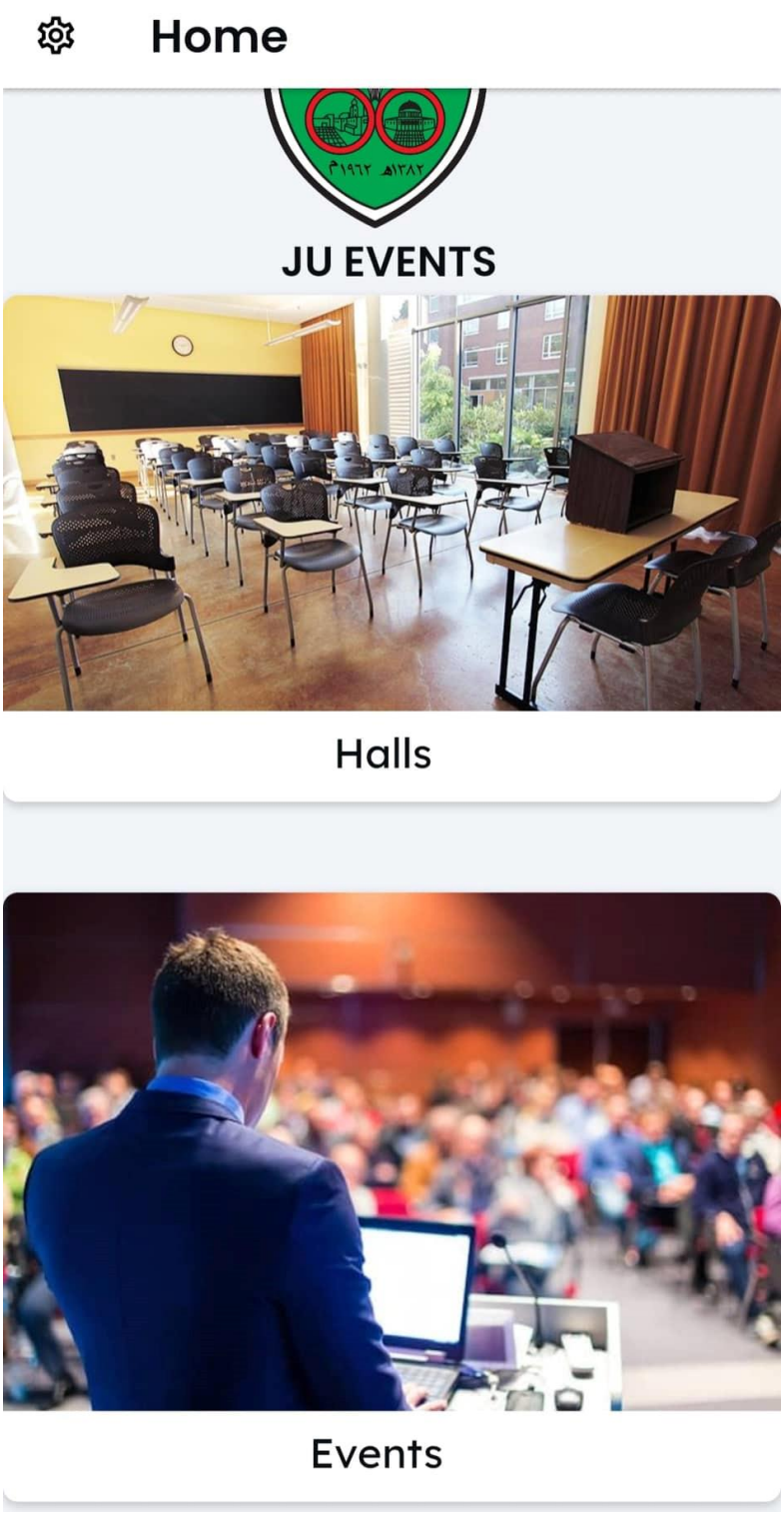

Figure 22 home page 2

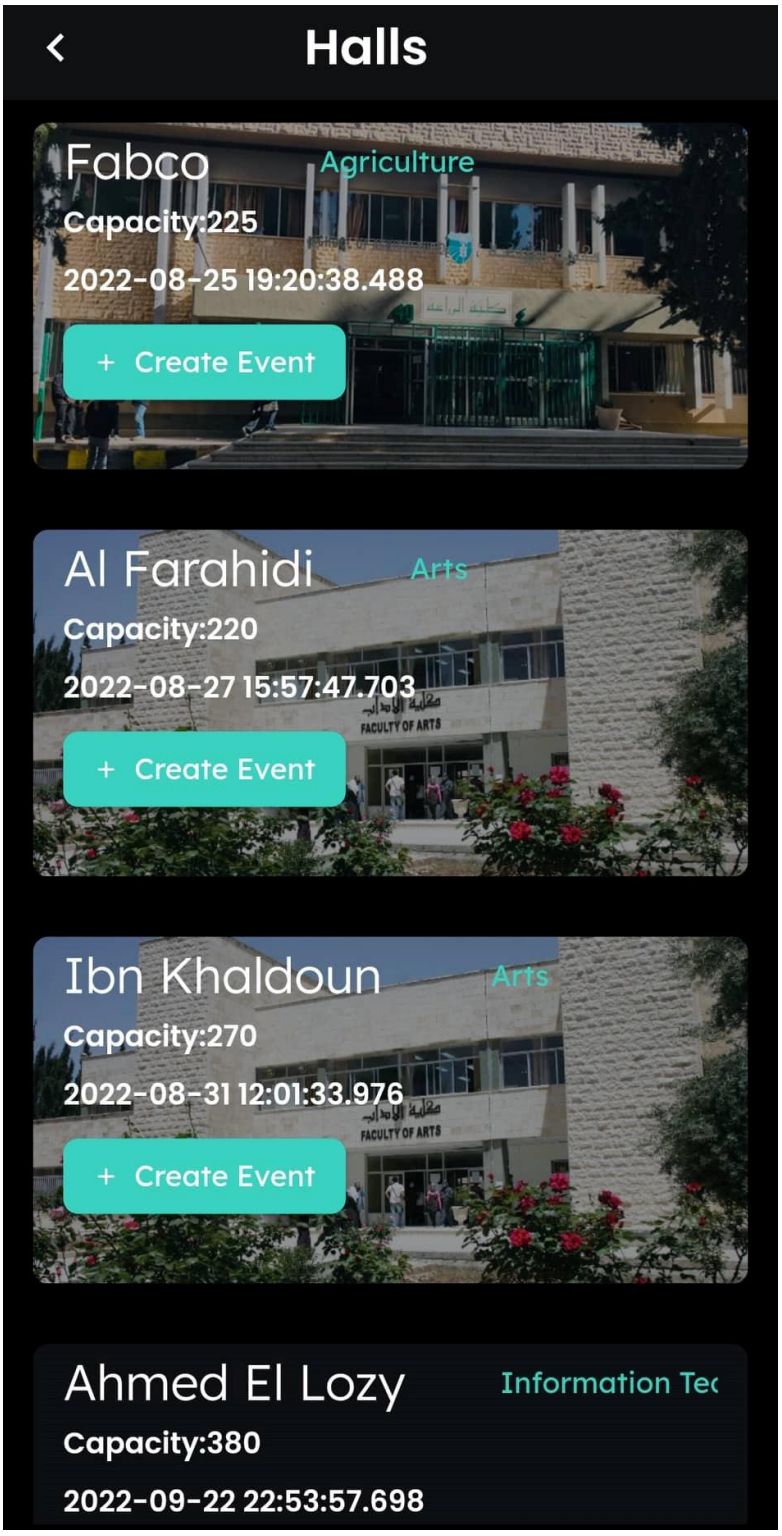

Figure 23 halls page

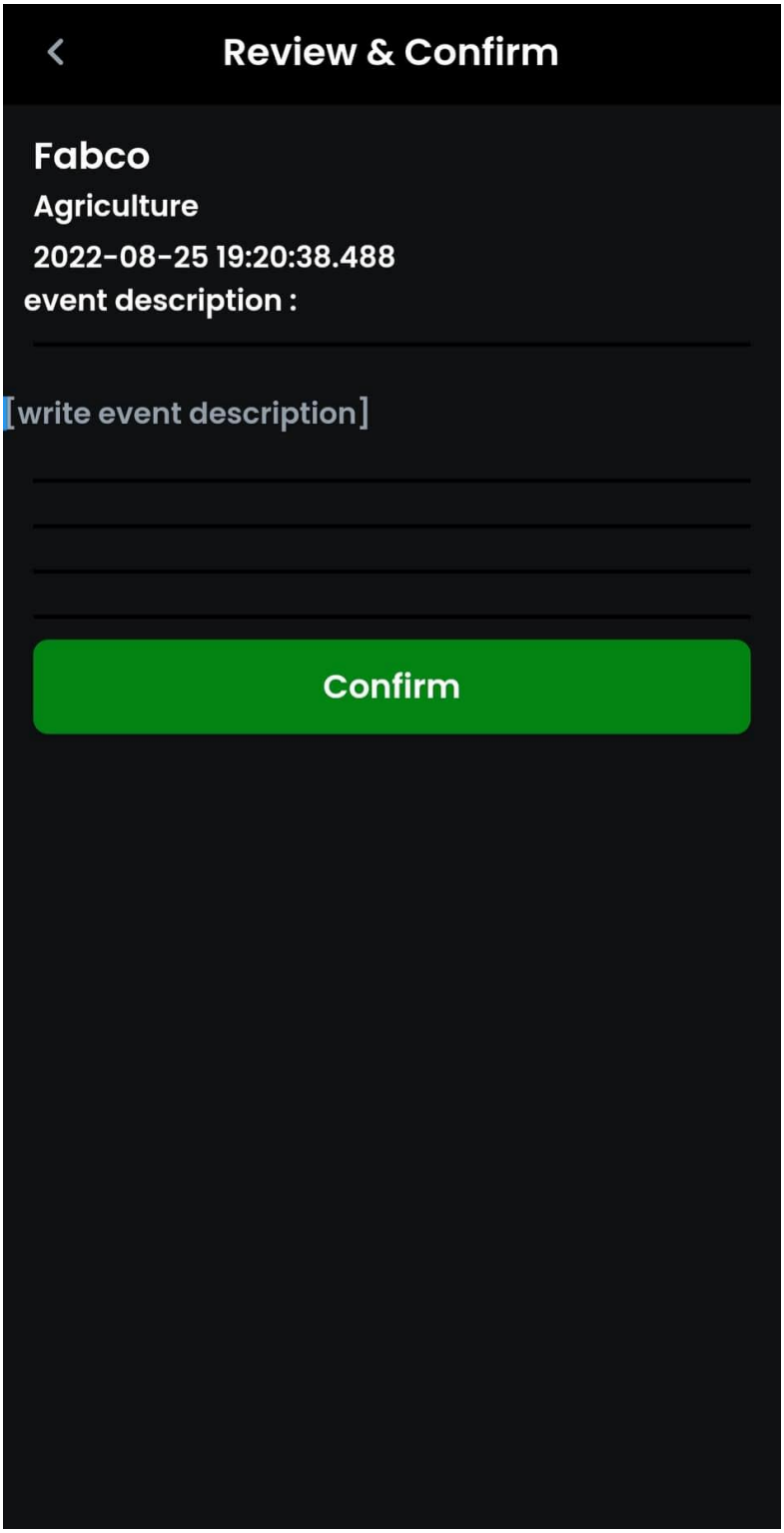

Figure 24 empty confirm page

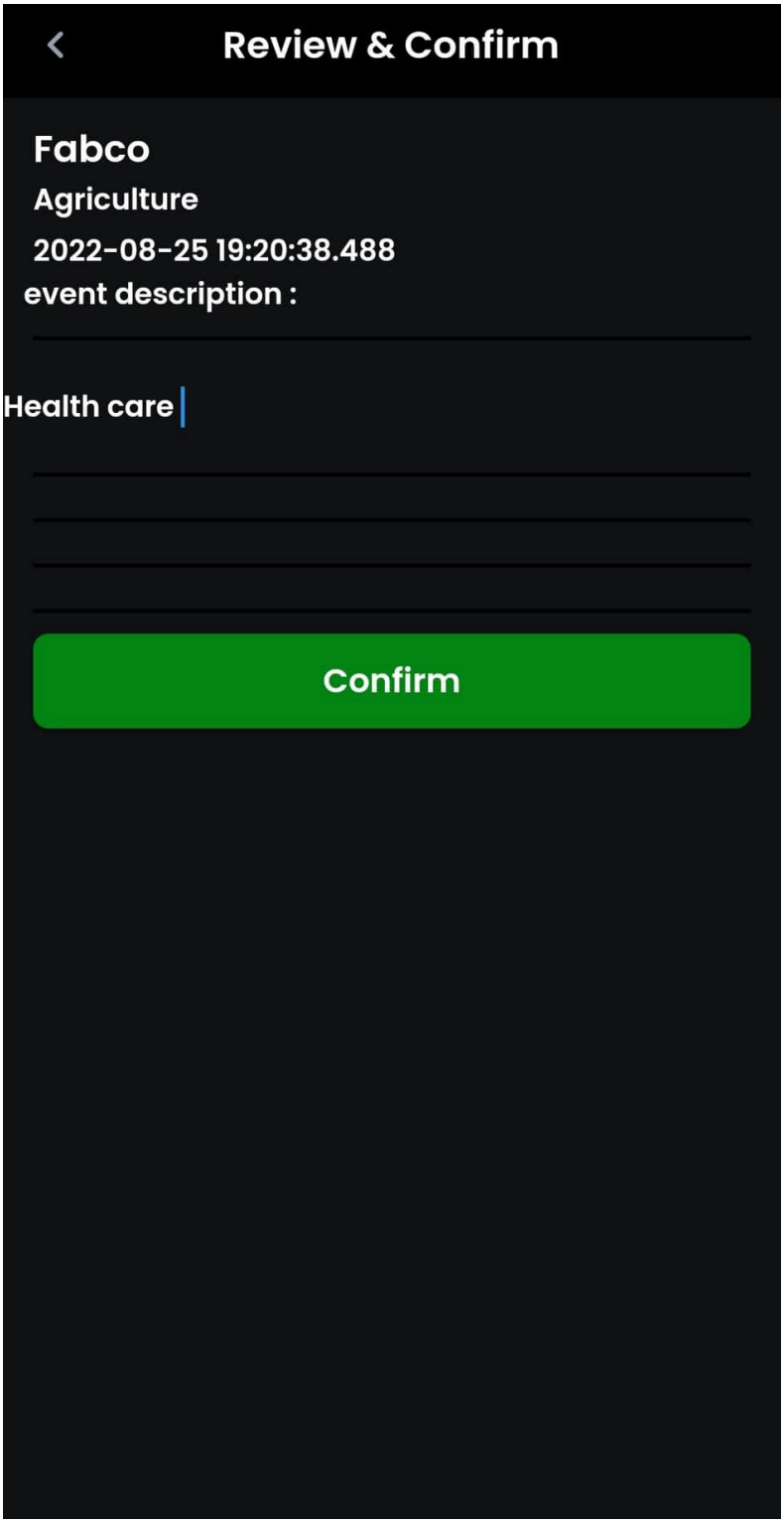

Figure 25 confirm page

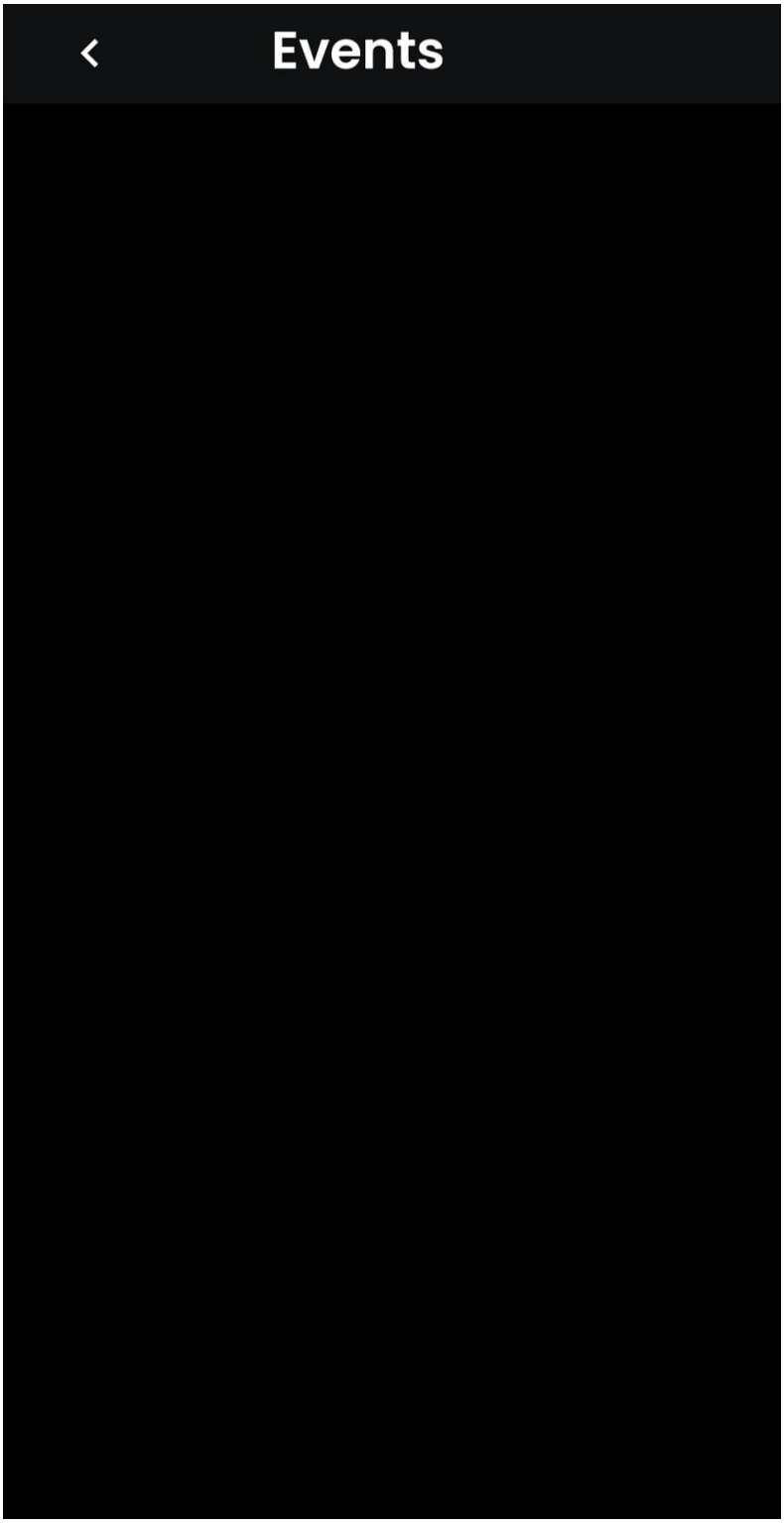

Figure 26 empty events page

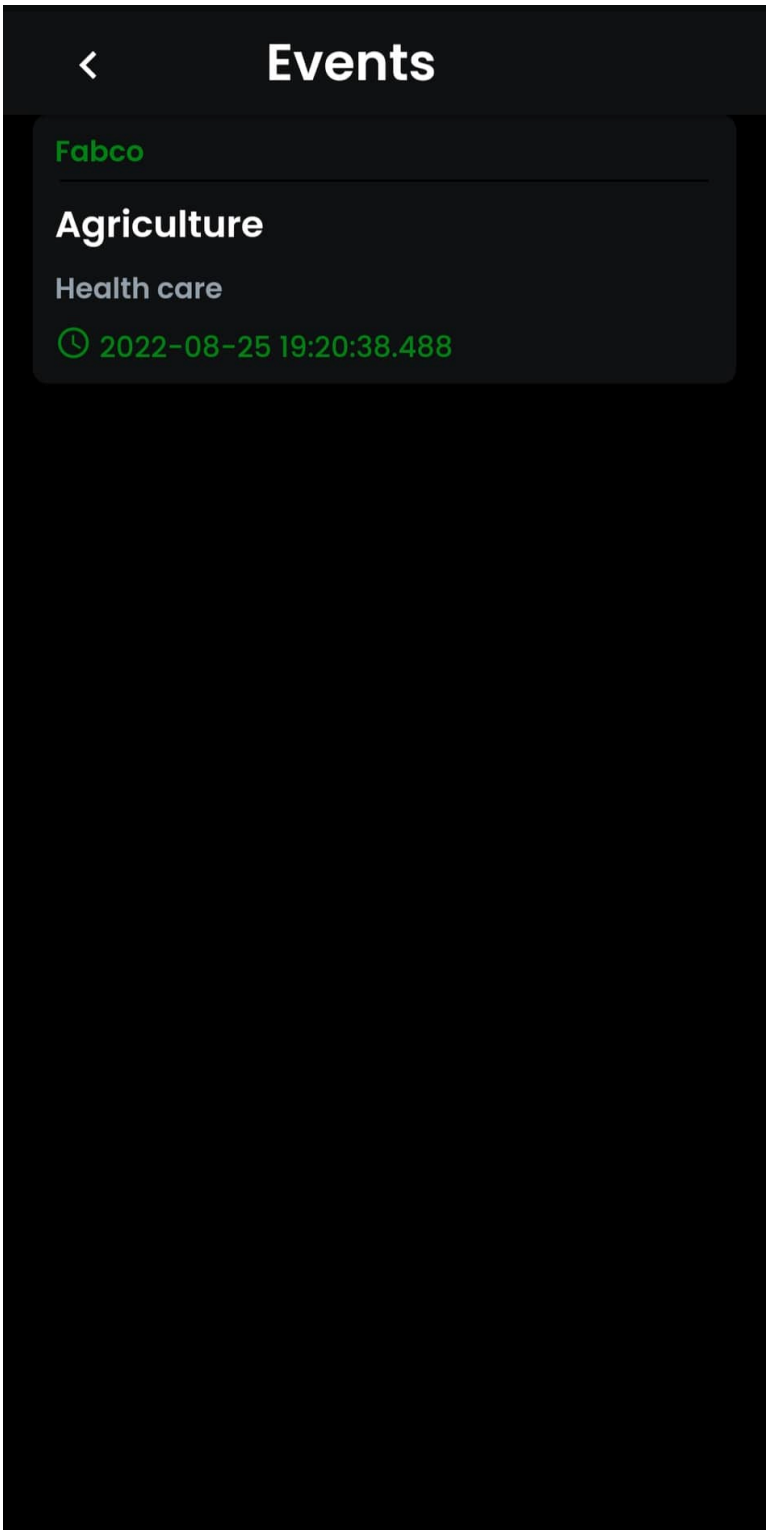

Figure 27 events page

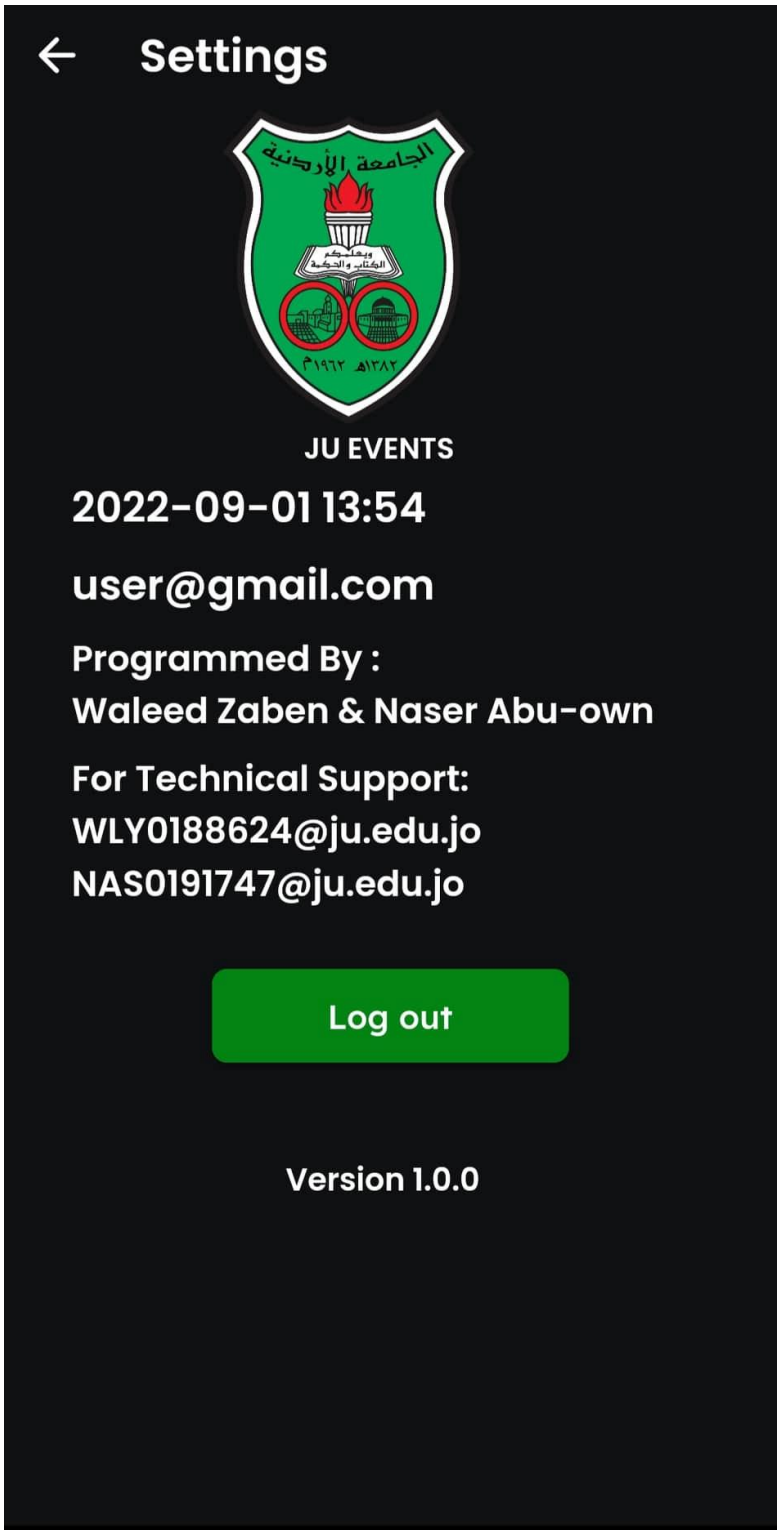

Figure 28 settings page

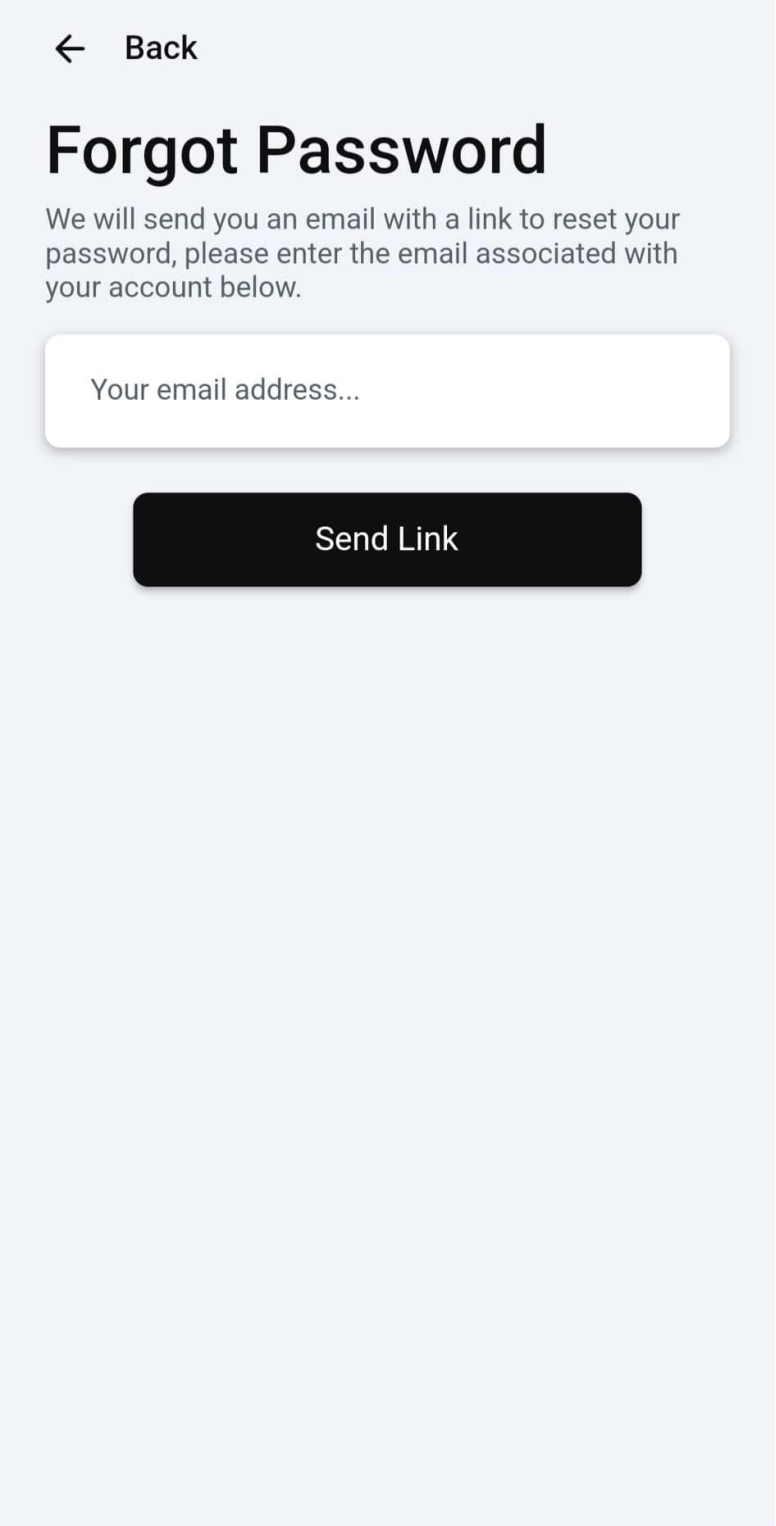

Figure 29 empty reset password page

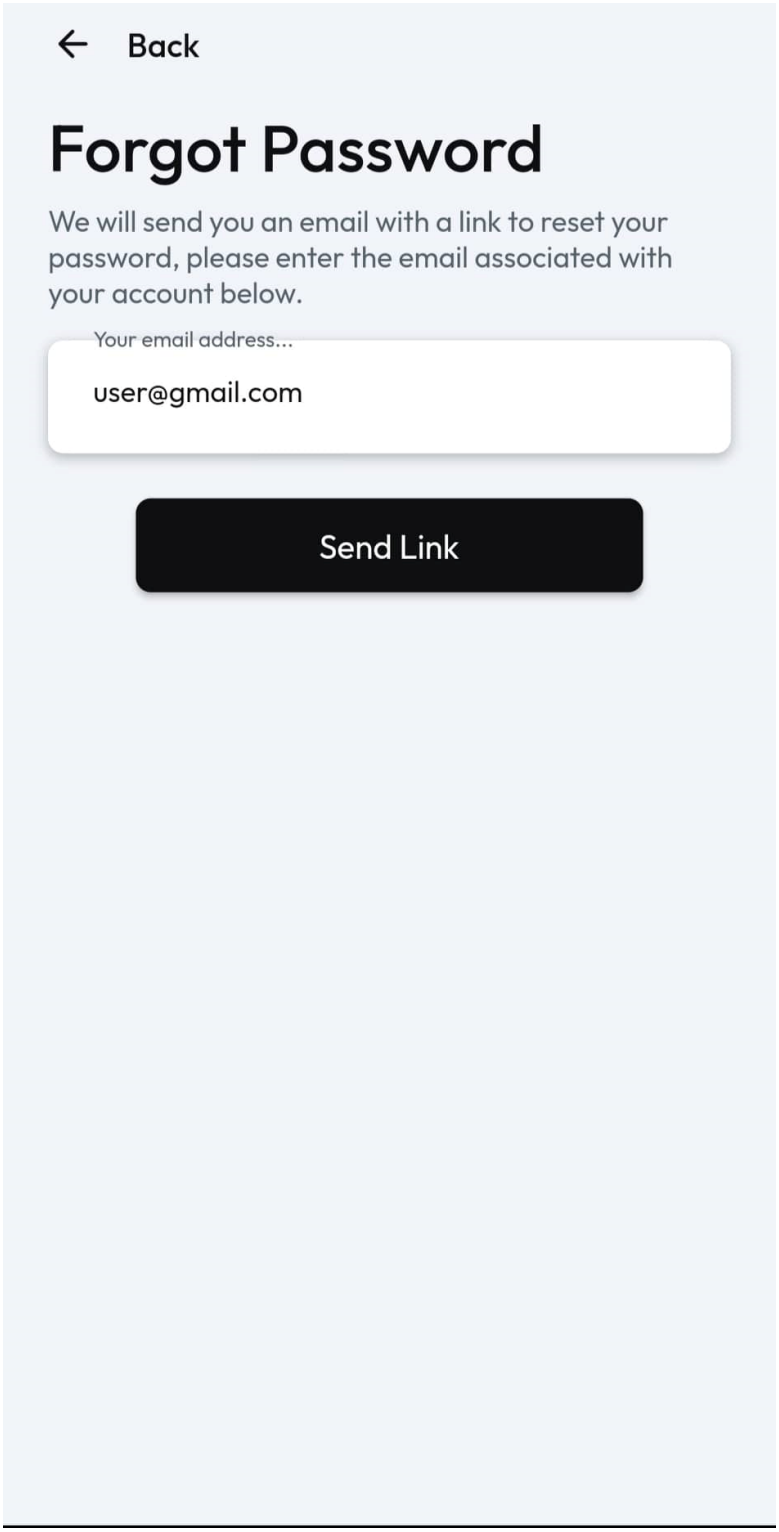

Figure 30 reset password page 1

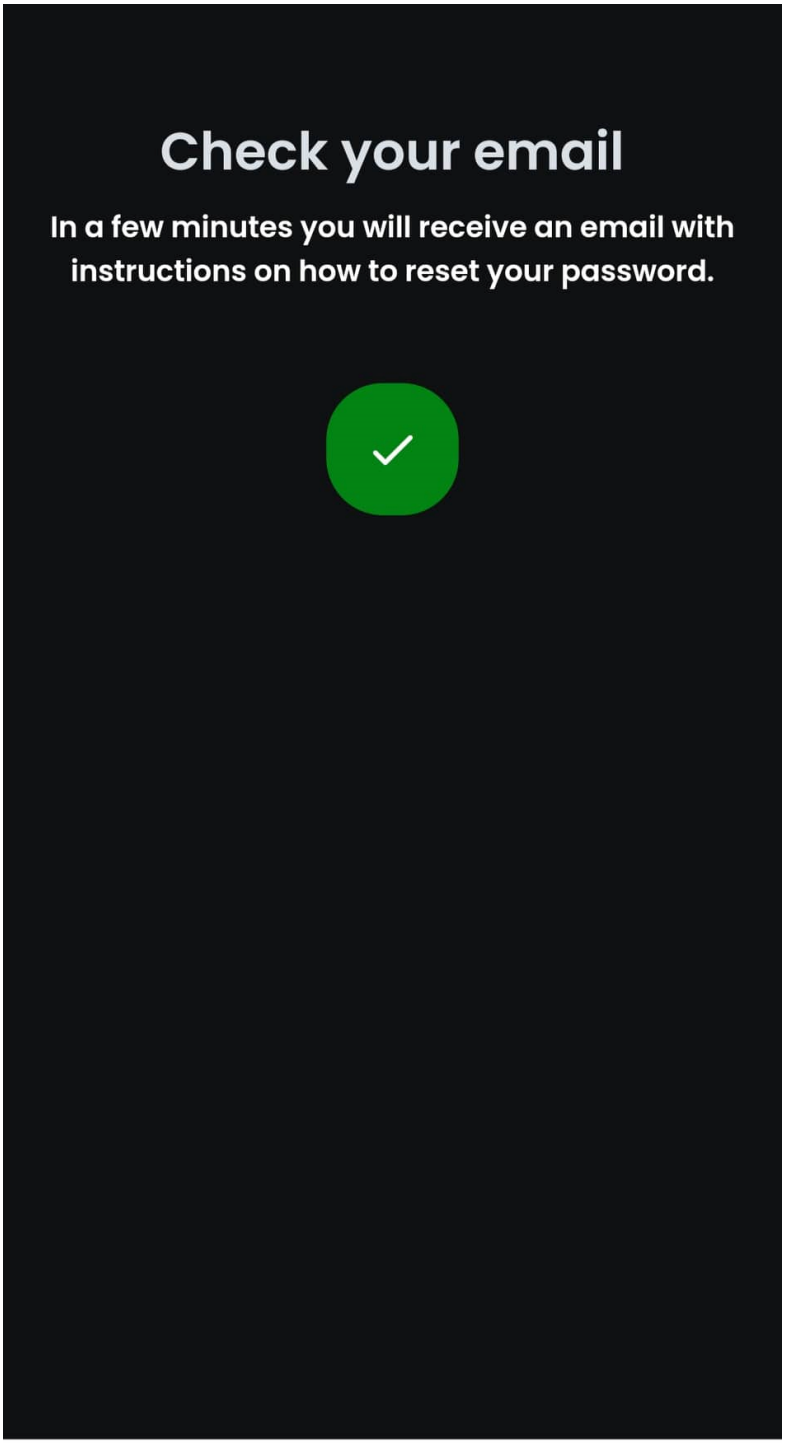

Figure 31 reset password page 2

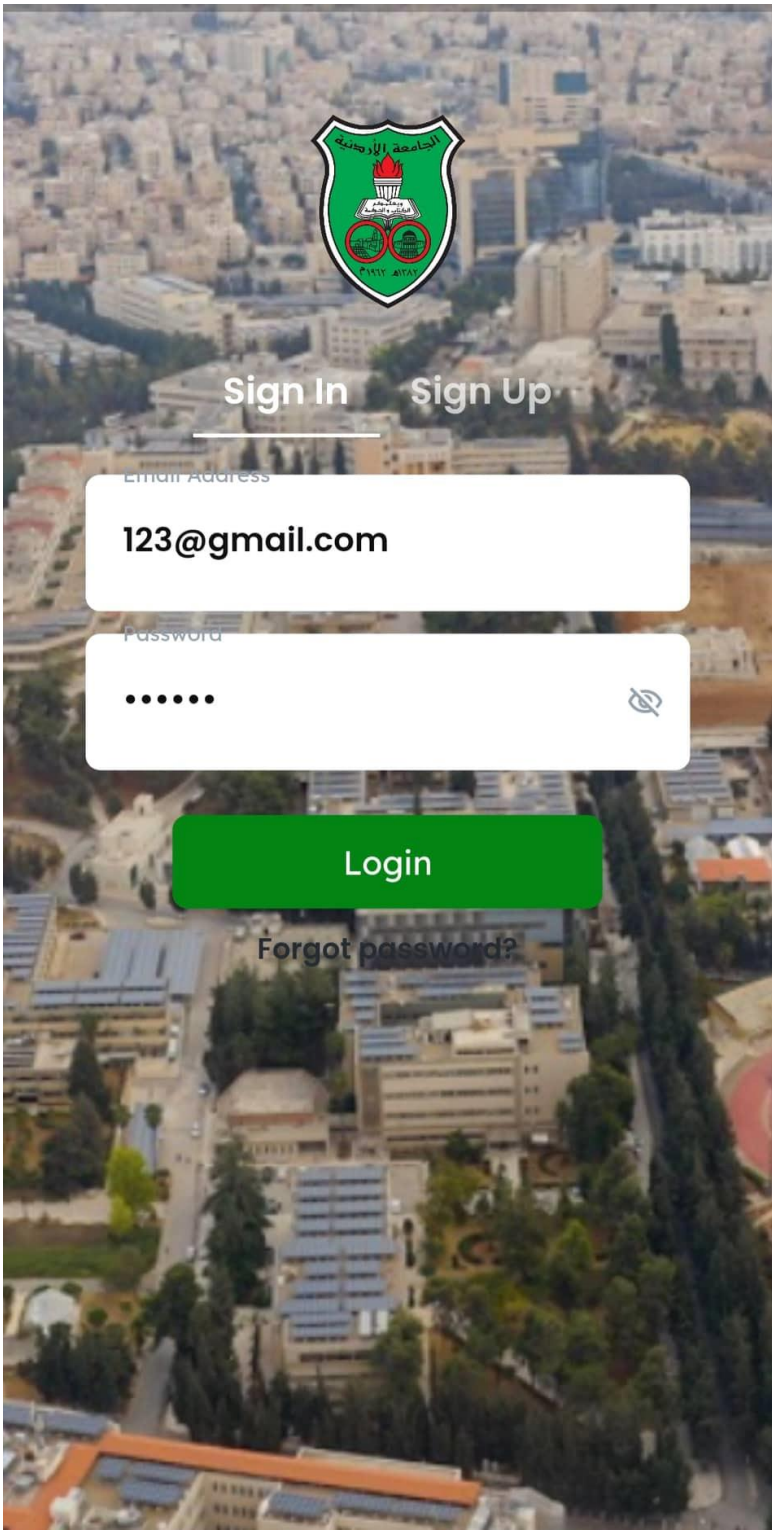

Figure 32 admin log in page

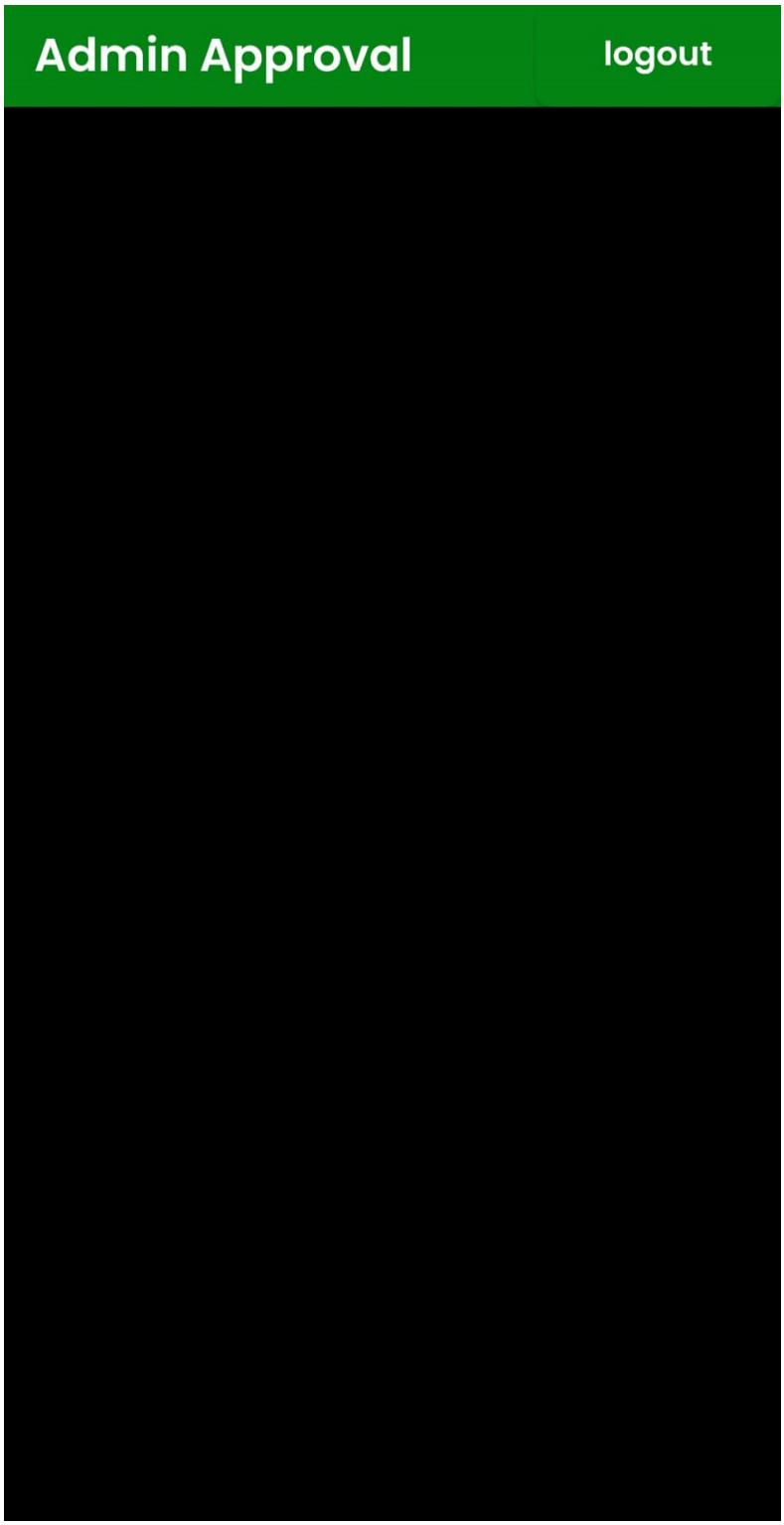

Figure 33 empty admin page

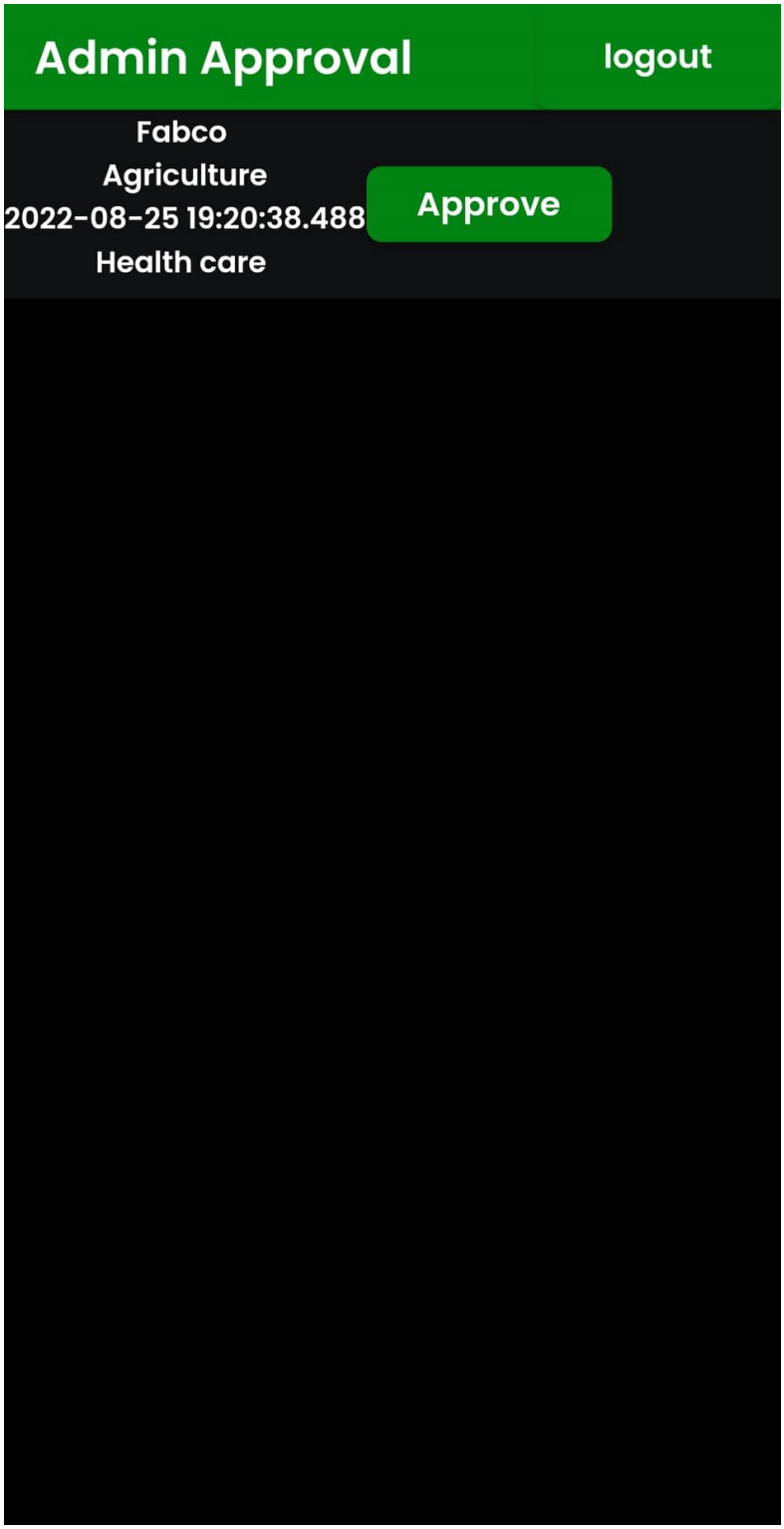

Figure 34 admin page

5.5 Summary

In this chapter shows all implementation details for “JU EVENTS” including the database and graphical user interface implementation.

6.0 CHAPTER SIX: SYSTEM TESTING AND INSTALLATION

6.1 Introduction

In this chapter we will make the test system by certified test globally the Heuristic Evaluation Test and Cooperation Evaluation Test. This chapter present introduction in Section 6.1, heuristic evaluation is elaborate in Section 6.2 in addition the cooperative evaluation is stated in Section 6.3, Section 6.4, system installation. Furthermore, this chapter is finally summarized in Section 6.5.

6.2 Heuristics Evaluation

Heuristic Numbering Scheme	Frequency	Ratio (%)
H1	5	7.576
H2	5	7.676
H3	5	7.676
H4	10	15.152
H5	7	10.606
H6	6	9.09
H7	8	12.121
H8	5	7.576
H9	5	7.576
H10	10	15.152
Total	**66**	**100%**

Table 7: Summary of Violations by Heuristics.

Severity Rating	Frequency	Ratio (%)
0	15	0.23
1	12	0.181
2	10	0.151
3	9	0.14
4	20	0.30
Total	66	100%

Table 8: Summary of Violations by Severity Rating For Participant (1).

- For more details, refer to Appendix A.

Severity Rating	Frequency	Ratio (%)
0	9	0.14
1	12	0.181
2	15	0.23
3	10	0.151
4	20	0.30
Total	66	100%

Table 9: Summary of Violations by Severity Rating For Participant (2).

- For more details, refer to Appendix A.

Severity Rating	Frequency	Ratio (%)
0	12	0.181
1	10	0.151
2	15	0.23
3	9	0.14
4	20	0.30
Total	66	100%

Table 10: Summary of Violations by Severity Rating For Participant (3).

- For more details, refer to Appendix A.

6.3 Cooperative Evaluation

After using the tool and answering the JU-EVENTS test, please indicate the extent to which you agree or disagree with each of the following statements regarding your experience with the system.

- Cooperative Evaluation:

No.	Criteria	Participant 1	Participant 2	Participant 3
1.	**Gender**	Male	Female	Female
2.	**Age**			
3.	**Educational Level**	BA	BA	BA
4.	**Programmer Taken**			
5.	**Institution**	University of Jordan	University of Jordan	University of Jordan

Table 11: Participants Details.

6.3.1 Pre-Evaluation Procedures:

Participants were contacted through telephone conversations asking them the possibility to participate in the co-operative evaluation. A brief introduction to JU-EVENTS was given to the participants 10 minutes before they started the evaluation, and participants were asked to read that introductory document. The document also has a list of tasks, which will be performed by the participants throughout the co-operative evaluation. Users were told that they need to think aloud when facing any problem in the system. They were also told that each task they perform is monitored and timed.

6.3.2 Evaluation Procedures:

During the evaluation session, a moderator accompanied the users to do the co-operative evaluation. A comment shown in Appendix B was used by the moderator to write down the comments of each user for each task. Users were helped when they really face serious problems performing the tasks. The following tables show the comments pre-pared by the moderator for each participant.

Task No.	Test	Time Taken to Complete the Task	Comments
A.	**Administrator**		
1.	Access to The System		
2.	Users Management		
3.	Resources Management		
B.	**Users**		
1.	Access to The System		
2.	Resources Management		

Table 12: Cooperative Evaluation for ATPPPS for Participant (1).

Task No.	Test	Time Taken to Complete the Task	Comments
A.	**Administrator**		
1.	Access to The System		
2.	Users Management		
3.	Resources Management		
B.	**Users**		
1.	Access to The System		
2.	Resources Management		

Table 13: Cooperative Evaluation for ATPPPS for Participant (2).

Task No.	Test	Time Taken to Complete the Task	Comments
A.	**Administrator**		
1.	Access to The System		
2.	Users Management		
3.	Resources Management		
B.	**Users**		
1.	Access to The System		
2.	Resources Management		

Table 14: Cooperative Evaluation for ATPPPS for Participant (3).

- It is important to compare the time taken by each participant to complete each single task com-pared to the default time allocated by the moderator as shown in next table.

Task No.	Default	Participant 1	Participant 2	Participant 3
A. Administrator Activity				
1.				
2.				
Total Completion Time				

Table 15: Task Completion Times in Minutes and Seconds.

6.3.3 Post-Evaluation Procedures:

After completing the co-operative evaluation, participants were given a post-test questionnaire to fill in, which is shown in Appendix B. This questionnaire was important to capture their thoughts and feelings about JU-EVENTS while they were still fresh. The questionnaire was then followed by a short interview and discussion, which mainly focused on the initial modified design of the ATPPPS. Table (18) shows the responses of the 3 participants to the post-test questionnaire.

No.	Statement	Participant 1	Participant 2	Participant 3	Average
1	Is the system stable?				
2	Is the system ease of use?				
3	Are the functionality of the system achieve user's needs?				
Average					

Table 16: Participants' Responses to the Post-Test Questionnaire.

6.4 System Installation

Android Studio:
https://www.androidstudio.com

Firebase:

https://www.firebase.com

Operating System (Microsoft Windows 11):

http://windows.microsoft.com/en-us/windows/downloads

Flowcharts Online Maker:

https://draw.io/

Smart Sheets Online Maker:

https://www.smartsheet.com/

6.5 summary

This chapter showed intestine testing and evaluation for JU-EVENTS. The heuristic evaluation was conducted system with 3 expert users.

The Heuristic and cooperative evaluation have also shown competitive and acceptable performance for the system indicating that the system is easy to use and has fewer usability problems.

7.0 CHAPTER SEVEN: PROJECT CONCLUSION AND FUTURE WORK

7.1 Introduction

We expect our mobile application project going to achieve its goals where the students and professors will be able to create events by selecting the hall name, college, and the time also the ability to attend events.

7.2 Overall Weaknesses

The weaknesses in building this project are:

- Once you create your event you won't be able to cancel the reservation.
- There is no website for this application.

7.3 Overall Strengths

The strengths in building this project are:

- Reduce the effort spent to know the current events to attend.
- The application is easy to use.
- Help students and professors to reserve halls smoothly.

7.4 Future Work

As future work on our app, we look forward to: Entering the Community Service activities in our app so students will be able to know the current Community Service activities to attend.

7.5 summary

In this chapter, we wrote weaknesses and strengths in order with the hope to reduce the weaknesses and focus on future work.

APPENDIX A

Heuristic Evaluation – A System Checklist

Please fill in the evaluation form below, which is a form of checklist, by writing "X" in the appropriate place which mostly describes the best answer to the corresponding criterion. This form is to be filled after you have investigated the system interface i.e. have looked at, and examined the interface. The answer to each criterion is either:

- "**0**" which means "I don't agree that this is a usability problem at all".
- "**1**" which means "Cosmetic problem only: need not be fixed unless extra time is available on project".
- "**2**" which means "Minor usability problem: fixing this should be given low priority".
- "**3**" which means "Major usability problem: important to fix, so should be given high priority".
- "**4**" which means "Usability catastrophe: imperative to fix this before product can be released".

Thank you for your willingness to evaluate this system. Your time and effort are highly appreciated.

H1. Visibility of System Status

The system should always keep user informed about what is going on, through appropriate feedback within reasonable time.

Number	Review Checklist	0 1 2 3 4	Comments
1.1	Does every display begin with a title or header that describes screen contents?	( )( )( )( )( )	
1.2	Do menu instructions, prompts, and error messages appear in the same place(s) on each menu?	( )( )( )( )( )	
1.3	Is there some form of system feedback for every operator action?	( )( )( )( )( )	
1.4	Are responses times appropriate to the users cognitive processing?	( )( )( )( )( )	
1.5	Is there visual feedback in menus or dialog boxes about which choices are selectable?	( )( )( )( )( )	

H2. Match between System and the Real World

The system should speak the user's language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

Number	Review Checklist	0 1 2 3 4	Comments
2.1	Are icons concrete and familiar?	( )( )( )( )( )	
2.2	Are menu choices ordered in the most logical way, given the user, the item names, and the task variables?	( )( )( )( )( )	
2.3	Do related and interdependent fields appear on the same screen?	( )( )( )( )( )	
2.4	When prompts imply a necessary action, are the words in the message consistent with that action?	( )( )( )( )( )	
2.5	On data entry screens, are tasks described in terminology familiar to users?	( )( )( )( )( )	

H3. User Control and Freedom

Users should be free to select and sequence tasks (when appropriate), rather than having the system does this for them. Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Users should make their own decisions (with clear information) regarding the costs of exiting current work. The system should support undo and redo.

Number	Review Checklist	0 1 2 3 4	Comments
3.1	When a user's task is complete, does the system wait for a signal from the user before processing?	( )( )( )( )( )	
3.2	Are users prompted to confirm commands that have drastic, destructive consequences?	( )( )( )( )( )	
3.3	Are character edits allowed in data entry fields?	( )( )( )( )( )	
3.4	If menu lists are long (more than seven items), can users select an item either by moving the cursor or by typing a mnemonic code?	( )( )( )( )( )	
3.5	If the system uses a pointing device, do users have the option of either clicking on menu items or using a keyboard shortcut?	( )( )( )( )( )	

Appendix B

Cooperative for JU-EVENTS

Task No.	Test	Time Taken to Complete the Task	Comments
A.	**Administrator**		
1.	Access to The System		
2.	Users Management		
3.	Resources Management		
B.	**Users**		
1.	Access to The System		
2.	Resources Management		

APPENDIX C

ATPPPS Usability Test (Post-test Questionnaire)

Gender: M / F **Age:** _____

Educational Level: _____

Programmer Taken: _____

Institution: _____

After using the system and answering JU-EVENTS test, please indicate the extent to which you agree or disagree with each of the following statements regarding to your experience with the system.

No.	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1.	Is the app stable?					
2.	Is the app ease of use?					
3.	Are the functionality of the app achieve user's needs?					

H4. Consistency and Standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

Number	Review Checklist	0 1 2 3 4	Comments
4.1	Has a heavy use of all uppercase letters on a screen been avoided?	( )( )( )( )( )	

4.2	Are icons labeled?	( )( )( )( )( )	
4.3	Are there no more than twelve to twenty icon types?	( )( )( )( )( )	
4.4	Does each window have a title?	( )( )( )( )( )	
4.5	Is vertical and horizontal scrolling possible in each window?	( )( )( )( )( )	
4.6	Are menu choice lists presented vertically?	( )( )( )( )( )	
4.7	Are menu titles either centered or left-justified?	( )( )( )( )( )	
4.8	Are menu items left-justified, with the item number or mnemonic preceding the name?	( )( )( )( )( )	
4.9	Do embedded field-level prompts appear to the right of the field label?	( )( )( )( )( )	
4.10	Are attention-getting techniques used with care?	( )( )( )( )( )	

H5. Help Users Recognize, Diagnose, and Recover From Errors

Error messages should be expressed in plain language (NO CODES).

Number	Review Checklist	0 1 2 3 4	Comments
5.1	Is sound used to signal an error?	( )( )( )( )( )	
5.2	Are error messages worded so that the system, not the user, takes the blame?	( )( )( )( )( )	
5.3	Do error messages suggest the cause of the problem?	( )( )( )( )( )	
5.4	Do error messages indicate what action the user needs to take to correct the error?	( )( )( )( )( )	
5.5	If the system supports both novice and expert users, are multiple levels of error-message detail available?	( )( )( )( )( )	
5.6	If an error is detected in a data entry field, does the system place the cursor in that field or highlight the error?	( )( )( )( )( )	
5.7	Do error messages inform the user of the error's severity?	( )( )( )( )( )	

H6. Error Prevention

Even better than good error messages is a careful design which prevents a problem from occurring in the first place.

Number	Review Checklist	0 1 2 3 4	Comments
6.1	Are menu choices logical, distinctive, and mutually exclusive?	( )( )( )( )( )	
6.2	Are data inputs case-blind whenever possible?	( )( )( )( )( )	
6.3	Does the system prevent users from making errors whenever possible?	( )( )( )( )( )	
6.4	Does the system warn users if they are about to make a potentially serious error?	( )( )( )( )( )	
6.5	Do data entry screens and dialog boxes indicate the number of character spaces available in a field?	( )( )( )( )( )	
6.6	Do fields in data entry screens and dialog boxes contain default values when appropriate?	( )( )( )( )( )	

H7. Recognition Rather Than Recall

Make objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

Number	Review Checklist	0 1 2 3 4	Comments
7.1	For question and answer interfaces, are visual cues and white space used to distinguish questions, prompts, instructions, and user input?	( )( )( )( )( )	
7.2	Are inactive menu items grayed out or omitted?	( )( )( )( )( )	
7.3	Do data entry screens and dialog boxes indicate when fields are optional?	( )( )( )( )( )	
7.4	Are prompts, cues, and messages placed where the eye is likely to be looking on the screen?	( )( )( )( )( )	
7.5	Are field labels close to fields, but separated by at least one space?	( )( )( )( )( )	
7.6	Have items been grouped into logical zones, and have headings been used to distinguish between zones?	( )( )( )( )( )	
7.7	Are borders used to identify meaningful groups?	( )( )( )( )( )	
7.8	Is color coding consistent throughout the system?	( )( )( )( )( )	

H8. Flexibility and Minimalist Design

Accelerators-unseen by the novice user-may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions. Provide alternative means of access and operation for users who differ from the "average" user (e.g., physical or cognitive ability, culture, language, etc.)

Number	Review Checklist	0 1 2 3 4	Comments
8.1	If menu lists are short (seven items or fewer), can users select an item by moving the cursor?	( )( )( )( )( )	
8.2	If the system uses a pointing device, do users have the option of either clicking on fields or using a keyboard shortcut?	( )( )( )( )( )	
8.3	On data entry screens, do users have the option of either clicking directly on a field or using a keyboard shortcut?	( )( )( )( )( )	
8.4	On menus, do users have the option of either clicking directly on a menu item or using a keyboard shortcut?	( )( )( )( )( )	
8.5	In dialog boxes, do users have the option of either clicking directly on a dialog box option or using a keyboard shortcut?	( )( )( )( )( )	

H9. Aesthetic and Minimalist Design

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

Number	Review Checklist	0 1 2 3 4	Comments
9.1	Are all icons in a set visually and conceptually distinct?	( )( )( )( )( )	
9.2	Does each icon stand out from its background?	( )( )( )( )( )	
9.3	Does each data entry screen have a short, simple, clear, distinctive title?	( )( )( )( )( )	
9.4	Are field labels brief, familiar, and descriptive?	( )( )( )( )( )	
9.5	Are there pop-up or pull-down menus within data entry fields that have many, but well-defined, entry options?	( )( )( )( )( )	

H10. Help and Documentation

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Number	Review Checklist	0 1 2 3 4	Comments
10.1	Are on-line instructions visually distinct?	( )( )( )( )( )	
10.2	If menu choices are ambiguous, does the system provide additional explanatory information when an item is selected?	( )( )( )( )( )	
10.3	Is the help function visible; for example, a key labeled help or a special menu?	( )( )( )( )( )	
10.4	Navigation: Is information easy to find?	( )( )( )( )( )	
10.5	Presentation: Is the visual layout well designed?	( )( )( )( )( )	
10.6	Conversation: Is the information accurate, complete, and understandable?	( )( )( )( )( )	
10.7	Is the information relevant?	( )( )( )( )( )	
10.8	Can users easily switch between help and their work?	( )( )( )( )( )	
10.9	Is it easy to access and return from the help system?	( )( )( )( )( )	
10.10	Can users resume work where they left off after accessing help?	( )( )( )( )( )	